

CLASS I AIR QUALITY PERMIT

DRAFT PERMIT No. 81660

PERMITTEE: Lhoist North America of Arizona, Inc.
FACILITY: Douglas Plant
PLACE ID: 2148
DATE ISSUED:
EXPIRY DATE:

SUMMARY

This Class I renewal operating permit is issued to Lhoist North America of Arizona, Inc., the Permittee, for the continued operation of a Lime Plant located at Paul Spur, approximately 10 miles west of Douglas, Cochise County, Arizona. This permit renews and supersedes permit No. 61785.

The facility consists of three lime kilns, miscellaneous lime handling equipment including conveyor belts, storage bins, crushers, and mills, and associated air pollution control equipment. The potential emission rates of the following pollutants are greater than major source thresholds: particulate matter with an aerodynamic diameter less than 10 microns (PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon monoxide (CO). Therefore, the facility is classified as a major source as defined in A.A.C. R18-2-101(75), and requires a Class I permit pursuant to A.A.C R18-302(B)(1)(a).

This permit is issued in accordance with Title 49, Chapter 3 of the Arizona Revised Statutes. All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C) and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. This permit also contains conditions from the particulate matter with an aerodynamic diameter less than 10 microns (PM₁₀) State Implementation Plan for the Paul Spur Group I Area (PSSIP), dated July 1990, prepared by the Office of Air Quality, Arizona Department of Environmental Quality. All terms and conditions in this permit are enforceable by the Administrator of the U.S. Environmental Protection Agency.

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ATTACHMENT "A": GENERAL PROVISIONS

I. PERMIT EXPIRATION AND RENEWAL

- A.** This permit is valid for a period of five (5) years from the date of issuance.
[ARS § 49-426.F, A.A.C. R18-2-306.A.1]
- B.** The Permittee shall submit an application for renewal of this permit at least six (6) months, but not more than eighteen (18) months, prior to the date of permit expiration.
[A.A.C. R18-2-304.D.2]

II. COMPLIANCE WITH PERMIT CONDITIONS

- A.** The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona Revised Statutes (A.R.S.) Title 49, Chapter 3, and the air quality rules under Title 18, Chapter 2 of the Arizona Administrative Code. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
[A.A.C. R18-2-306.A.8.a]
- B.** It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
[A.A.C. R18-2-306.A.8.b]

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

- A.** The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[A.A.C. R18-2-306.A.8.c]
- B.** The permit shall be reopened and revised under any of the following circumstances:
1. Additional applicable requirements under the Clean Air Act become applicable to the Class I source. Such a reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to A.A.C. R18-2-322.B. Any permit revision required pursuant to this subparagraph shall comply with the provisions in A.A.C. R18-2-322 for permit renewal and shall reset the five-year permit term;

[A.A.C. R18-2-321.A.1.a]

2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit;

[A.A.C. R18-2-321.A.1.b]

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; and

[A.A.C. R18-2-321.A.1.c]

4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

[A.A.C. R18-2-321.A.1.d]

- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under Condition III.B.1 above, affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition III.B.1 above shall not result in a resetting of the five-year permit term.

[A.A.C. R18-2-321.A.2]

IV. POSTING OF PERMIT

- A. The Permittee shall post this permit or a certificate of permit issuance at the facility in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:

[A.A.C. R18-2-315.A]

1. Current permit number; or
2. Serial number or other equipment identification number (equipment ID number) that is also listed in the permit to identify that piece of equipment.

- B. A copy of the complete permit shall be kept on site.

[A.A.C. R18-2-315.B]

V. FEE PAYMENT

The Permittee shall pay fees to the Director pursuant to ARS § 49-426(E) and A.A.C. R18-2-326.

[A.A.C. R18-2-306.A.9 and -326]

VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

- A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety (90)

days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
[A.A.C. R18-2-327.A]

- B.** The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.B.
[A.A.C. R18-2-327.B]

VII. COMPLIANCE CERTIFICATION

- A.** The Permittee shall submit a compliance certification to the Director semiannually, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15th, and shall report the compliance status of the source during the period between October 1st of the previous year and March 31st of the current year. The second certification shall be submitted no later than November 15th, and shall report the compliance status of the source during the period between April 1st and September 30th of the current year.
[A.A.C. R18-2-309.2.a]

- B.** The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
[A.A.C. R18-2-309.2.c.i]
2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period,
[A.A.C. R18-2-309.2.c.ii]
3. Status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certifications shall identify each deviation (including any deviations reported pursuant to Condition XI.B of this Attachment) during the period covered by the certification and take it into account for consideration in the compliance certification;
[A.A.C. R18-2-309.2.c.iii]
4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;
[A.A.C. R18-2-309.2.c.iii]
5. Other facts the Director may require to determine the compliance status of the source.
[A.A.C. R18-2-309.2.c.iv]

- C.** A copy of all compliance certifications shall also be submitted to the EPA Administrator.

[A.A.C. R18-2-309.2.d]

- D.** If any outstanding compliance schedule exists, a progress report shall be submitted with the semi-annual compliance certifications required in Condition VII.A above. The progress reports shall contain the information required by A.A.C R18-2-309.5.d.

[A.A.C. R18-2-309.5.d]

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[A.A.C. R18-2-309.3]

IX. INSPECTION AND ENTRY

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:

- A.** Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

[A.A.C. R18-2-309.4.a]

- B.** Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

[A.A.C. R18-2-309.4.b]

- C.** Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

[A.A.C. R18-2-309.4.c]

- D.** Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

[A.A.C. R18-2-309.4.d]

- E.** Record any inspection by use of written, electronic, magnetic and photographic media.

[A.A.C. R18-2-309.4.e]

X. ACCIDENTAL RELEASE PROGRAM

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

[40 CFR Part 68]

XI. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

[A.A.C. R18-2-310.01.A, B, and C]

1. Excess emissions shall be reported as follows:

- a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:

- (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XI.A.1.b below.
- (2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XI.A.1.a(1) above.

[A.A.C. R18-2-310.01.A]

- b. The report shall contain the following information:

- (1) Identity of each stack or other emission point where the excess emissions occurred;
[A.A.C. R18-2-310.01.B.1]
- (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
[A.A.C. R18-2-310.01.B.2]
- (3) Time and duration, or expected duration, of the excess emissions;
[A.A.C. R18-2-310.01.B.3]
- (4) Identity of the equipment from which the excess emissions emanated;
[A.A.C. R18-2-310.01.B.4]
- (5) Nature and cause of such emissions;
[A.A.C. R18-2-310.01.B.5]
- (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
[A.A.C. R18-2-310.01.B.6]
- (7) Steps that were or are being taken to limit the excess emissions; and
[A.A.C. R18-2-310.01.B.7]

- (8) If the excess emissions resulted from startup or malfunction, the report shall contain a list of the steps taken to comply with any permit procedures governing source operation during periods of startup or malfunction.
[A.A.C. R18-2-310.01.B.8]

2. In the case of continuous or recurring excess emissions, the notification requirements shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XI.A.1 above.
[A.A.C. R18-2-310.01.C]

B. Permit Deviations Reporting

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:

1. Notice that complies with Condition XI.A.1 above is prompt for deviations that constitute excess emissions;
[A.A.C. R18-2-306.A.5.b.i]
2. Notice that is submitted within two working days of discovery of the deviation is prompt for deviations of permit conditions identified by Condition I.B.1 of Attachment “B”;
[A.A.C. R18-2-306.A.5.b.ii]
3. Except as provided in Conditions XI.B.1 and 2 above, prompt notification of all other types of deviations shall be every 6-months, concurrent with the semi-annual compliance certifications required in Section VII, and can be submitted via the “Annual/Semiannual Deviation Monitoring Report” form available on the Arizona Department of Environmental Quality Website.
[A.A.C. R18-2-306.A.5.b.ii]

C. Emergency Provision

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions

attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[A.A.C. R18-2-306.E.1]

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if Condition XI.C.3 below is met.

[A.A.C. R18-2-306.E.2]

3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

[A.A.C. R18-2-306.E.3]

- a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;

[A.A.C. R18-2-306.E.3.a]

- b. The permitted facility was being properly operated at the time of the emergency;

[A.A.C. R18-2-306.E.3.b]

- c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

[A.A.C. R18-2-306.E.3.c]

- d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

[A.A.C. R18-2-306.E.3.d]

4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

[A.A.C. R18-2-306.E.4]

5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[A.A.C. R18-2-306.E.5]

D. Compliance Schedule

For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with

milestones, leading to compliance with the permit terms or conditions that have been violated.

[ARS § 49-426.I.3]

E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown

1. Applicability

A.A.C. R18-2-310 establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

- a. Promulgated pursuant to Sections 111 or 112 of the Act;
[A.A.C. R18-2-310.A.1]
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;
[A.A.C. R18-2-310.A.2]
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;
[A.A.C. R18-2-310.A.3]
- d. Contained in A.A.C. R18-2-715.F; or
[A.A.C. R18-2-310.A.4]
- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.
[A.A.C. R18-2-310.A.5]

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:
[A.A.C. R18-2-310.B]

- a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;
[A.A.C. R18-2-310.B.1]
- b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
[A.A.C. R18-2-310.B.2]

- c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;
[A.A.C. R18-2-310.B.3]
- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
[A.A.C. R18-2-310.B.4]
- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
[A.A.C. R18-2-310.B.5]
- f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
[A.A.C. R18-2-310.B.6]
- g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;
[A.A.C. R18-2-310.B.7]
- h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
[A.A.C. R18-2-310.B.8]
- i. All emissions monitoring systems were kept in operation if at all practicable; and
[A.A.C. R18-2-310.B.9]
- j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records.
[A.A.C. R18-2-310.B.10]

3. Affirmative Defense for Startup and Shutdown

- a. Except as provided in Condition XI.E.3.b below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation,

other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

[A.A.C. R18-2-310.C.1]

- (1) The excess emissions could not have been prevented through careful and prudent planning and design;

[A.A.C. R18-2-310.C.1.a]

- (2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;

[A.A.C. R18-2-310.C.1.b]

- (3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

[A.A.C. R18-2-310.C.1.c]

- (4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

[A.A.C. R18-2-310.C.1.d]

- (5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

[A.A.C. R18-2-310.C.1.e]

- (6) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

[A.A.C. R18-2-310.C.1.f]

- (7) All emissions monitoring systems were kept in operation if at all practicable; and

[A.A.C. R18-2-310.C.1.g]

- (8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.

[A.A.C. R18-2-310.C.1.h]

- b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XI.E.2 above.

[A.A.C. R18-2-310.C.2]

4. Affirmative Defense for Malfunctions during Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XI.E.2 above.

[A.A.C. R18-2-310.D]

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XI.E.2 or XI.E.3, the Permittee shall demonstrate, through submission of the data and information required by this Condition XI.E and Condition XI.A.1 above, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

[A.A.C. R18-2-310.E]

XII. RECORDKEEPING REQUIREMENTS

A. The Permittee shall keep records of all required monitoring information including, but not limited to, the following:

[A.A.C. R18-2-306.A.4.a]

1. The date, place as defined in the permit, and time of sampling or measurements;

[A.A.C. R18-2-306.A.4.a.i]

2. The date(s) any analyses were performed;

[A.A.C. R18-2-306.A.4.a.ii]

3. The name of the company or entity that performed the analyses;

[A.A.C. R18-2-306.A.4.a.iii]

4. A description of the analytical techniques or methods used;

[A.A.C. R18-2-306.A.4.a.iv]

5. The results of analyses; and

[A.A.C. R18-2-306.A.4.a.v]

6. The operating conditions existing at the time of sampling or measurement.

[A.A.C. R18-2-306.A.4.a.vi]

B. The Permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[A.A.C. R18-2-306.A.4.b]

XIII. REPORTING REQUIREMENTS

The Permittee shall submit the following reports:

- A. Compliance certifications in accordance with Section VII of Attachment “A”.
[A.A.C. R18-2-306.A.5.a]
- B. Excess emission; permit deviation, and emergency reports in accordance with Section XI of Attachment “A”.
[A.A.C. R18-2-306.A.5.b]
- C. Other reports required by any condition of Attachment “B”.

XIV. DUTY TO PROVIDE INFORMATION

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
[A.A.C. R18-2-304.G and -306.A.8.e]
- B. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.
[A.A.C. R18-2-304.H]

XV. PERMIT AMENDMENT OR REVISION

The Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI below, as follows:

- A. Administrative Permit Amendment;
[A.A.C. R18-2-318]
- B. Minor Permit Revision; and
[A.A.C. R18-2-319]
- C. Significant Permit Revision
[A.A.C. R18-2-320]
- D. The applicability and requirements for such action are defined in the above referenced regulations.

XVI. FACILITY CHANGE WITHOUT A PERMIT REVISION

- A. The Permittee may make changes that contravene an express permit term without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act or under ARS § 49-401.01(24);
[A.A.C. R18-2-317.A.1]
 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;
[A.A.C. R18-2-317.A.2]
 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;
[A.A.C. R18-2-317.A.3]
 4. The changes satisfy all requirements for a minor permit revision under A.A.C. R18-2-319.A;
[A.A.C. R18-2-317.A.4]
 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements; and
[A.A.C. R18-2-317.A.5]
 6. The changes do not constitute a minor NSR modification.
[A.A.C. R18-2-317.A.6]
- B.** The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Conditions XVI.A, C, and D of this Attachment.
[A.A.C. R18-2-317.B]
- C.** For each change under Conditions XVI.A and XVI.B above, a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change, but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible.
[A.A.C. R18-2-317.D]
- D.** Each notification shall include:
1. When the proposed change will occur;
[A.A.C. R18-2-317.E.1]
 2. A description of the change;
[A.A.C. R18-2-317.E.2]
 3. Any change in emissions of regulated air pollutants; and
[A.A.C. R18-2-317.E.3]

4. Any permit term or condition that is no longer applicable as a result of the change.
[A.A.C. R18-2-317.E.7]
- E. The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section XVI.
[A.A.C. R18-2-317.F]
- F. Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under A.A.C. R18-2-306.A.11 shall not require any prior notice under this Section XVI.
[A.A.C. R18-2-317.G]
- G. Notwithstanding any other part of Section XVI, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under Section XVI over the term of the permit, do not satisfy Condition XVI.A above.
[A.A.C. R18-2-317.H]

XVII. TESTING REQUIREMENTS

- A. Except as provided in Condition XVII.F below, the Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.
[A.A.C. R18-2-312.A]
- B. Operational Conditions during Performance Testing

Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

[A.A.C. R18-2-312.C]
- C. Performance Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.
[A.A.C. R18-2-312.B]
- D. Test Plan

At least 14 working days prior to performing a test, the Permittee shall submit a test plan to the Director, which must include the following, in addition to all other applicable requirements, as identified in the Arizona Testing Manual:

[A.A.C. R18-2-312.B]

 1. Test duration;

2. Test location(s);
3. Test method(s); and
4. Source operation and other parameters that may affect test results.

E. Stack Sampling Facilities

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

[A.A.C. R18-2-312.E]

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platform(s); (e.g. catwalk, scaffold, manlift etc.);
3. Safe access to sampling platform(s); and
4. Utilities for sampling and testing equipment.

F. Interpretation of Final Results

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

[A.A.C. R18-2-306.A.3.c and A.A.C. R18-2-312.F]

G. Report of Final Test Results

A written report of the results of performance tests conducted pursuant to 40 CFR 63, shall be submitted to the Director within 60 days after the test is performed. A written report of the results of all other performance tests shall be submitted within 4 weeks after the completion of the testing as specified in the Arizona Testing Manual. All performance testing reports shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

[A.A.C. R18-2-312.A and B]

H. Extension of Performance Test Deadline

For performance testing required under Condition XVII.A above, the Permittee may request an extension to a performance test deadline due to a force majeure event as follows:

[A.A.C. R18-2-312.J]

1. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Director in writing as soon as practicable following the date the Permittee first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline. The notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall be given as soon as practicable.
[A.A.C. R18-2-312.J.1]
2. The Permittee shall provide to the Director a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the Permittee proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure event occurs.
[A.A.C. R18-2-312.J.2]
3. The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Director. The Director shall notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable.
[A.A.C. R18-2-312.J.3]
4. Until an extension of the performance test deadline has been approved by the Director under Conditions XVII.H.1, 2, and 3 above, the Permittee remains subject to the requirements of Section XVII.
[A.A.C. R18-2-312.J.4]
5. For purposes of this Section XVII, a “force majeure event” means an event that will be or has been caused by circumstances beyond the control of the Permittee, its contractors, or any entity controlled by the Permittee that prevents it from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the Permittee's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the Permittee.
[A.A.C. R18-2-312.J.5]

XVIII. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.
[A.A.C. R18-2-306.A.8.d]

XIX. SEVERABILITY CLAUSE

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

[A.A.C. R18-2-306.A.7]

XX. PERMIT SHIELD

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled "Permit Shield". The permit shield shall not apply to minor revisions pursuant to Condition XV.B of this Attachment and any facility changes without a permit revision pursuant to Condition XVI of this Attachment.

[A.A.C. R18-2-317.F, - 320, and -325]

XXI. PROTECTION OF STRATOSPHERIC OZONE

If this source becomes subject to the provisions of 40 CFR Part 82, then the Permittee shall comply with these provisions accordingly.

[40 CFR Part 82]

XXII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS

For all equipment subject to a New Source Performance Standard or a National Emission Standard for Hazardous Air Pollutants, the Permittee shall comply with all applicable requirements contained in Subpart A of Title 40, Chapter 60 and Chapter 63 of the Code of Federal Regulations.

[40 CFR Part 60 Subpart A and Part 63 Subpart A]

ATTACHMENT "B": SPECIFIC CONDITIONS

I. FACILITY-WIDE REQUIREMENTS

A. Opacity

1. Instantaneous Surveys and Six-Minute Observations

a. Instantaneous Surveys

Any instantaneous survey required by this permit shall be determined by either option listed in Conditions I.A.1.a(1) and (2):

[A.A.C. R18-2-311.b]

(1) Alternative Method ALT-082 (Digital Camera Operating Technique)

(a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.

(b) The results of all instantaneous surveys and six-minute observations shall be obtained within 2 hours.

(2) EPA Reference Method 9 Certified Observer.

[A.A.C. R18-2-306.A.3.c]

b. Six-Minute Observations

Any six-minute observation required by this permit shall be determined by either option listed in Conditions I.A.1.b(1) and (2):

[A.A.C. R18-2-311.b]

(1) Alternative Method ALT-082 (Digital Camera Operating Technique)

(a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.

(b) The results of all instantaneous surveys and six-minute observations shall be obtained within 2 hours.

(2) EPA Reference Method 9.

c. The Permittee shall have on site or on call a person certified in EPA Reference Method 9 unless all 6-minute Method 9

observations required by this permit are conducted as a 6-minute Alternative Method-082 (Digital Camera Operating Technique) and all instantaneous visual surveys required by this permit are conducted as an instantaneous Alt-082 camera survey. Any 6-minute Method 9 observation required by this permit can be conducted as a 6-minute Alternative Method-082 and any instantaneous visual survey required by this permit can be conducted as an instantaneous Alt-082 camera survey.

[A.A.C. R18-2-306.A.3.c]

2. Monitoring, Recordkeeping, and Reporting Requirements

[A.A.C. R18-2-306.A.3.c]

- a. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.
- b. If the visible emissions on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.
- c. If the visible emissions on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.
 - (1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.
 - (2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:
 - (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
 - (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and

- (c) Report the event as an excess emission for opacity in accordance with Condition XI.A of Attachment "A".
- (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

B. The Permittee shall submit the following reports:

- 1. Deviations from the following Attachment "B" permit conditions shall be promptly reported in accordance with Condition XI.B.2 of Attachment "A":

[A.A.C. R18-2-306.A.5.b]

- a. Condition I.C
- b. Conditions II.B.2 and II.B.3.c
- c. Condition III.B.2
- d. Condition IV.B.2
- e. Conditions V.C.2 and V.C.3.a
- f. Condition VI.B
- g. Conditions VII.B.2 and VII.B.3.b
- h. Conditions VIII.C.2 and VIII.C.3.b through e
- i. Conditions IX.C.2 and IX.C.4.a(4)

- 2. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, The Permittee shall submit reports of all monitoring, record keeping, and reporting activities required by this Attachment performed in the same six month period as applies to the compliance certification period.

[A.A.C R18-2-306(A)(5)(a)]

- 3. The Permittee shall submit excess emissions and continuous monitoring system performance reports according to the schedule in Condition I.B.3.b. This report shall include the following:

[A.A.C R18-2-306(A)(3)(c), Permit 0368-93 Attachment A, IX(B)]

- a. For each continuously monitored point, the following information shall be provided:

- (1) The total number of operating hours of the kiln.

- (2) For each opacity monitor, the number and duration of monitor downtime incidents in total and totalized for each of the following standard causes:
 - (a) Monitor equipment malfunction;
 - (b) Non-monitor equipment malfunction;
 - (c) Quality assurance;
 - (d) Other known cause;
 - (e) Unknown cause.
- (3) For opacity, the number and duration of periods of excess emissions (i.e., periods in which the monitor records an average six-minute opacity in excess of 20 percent) in total and totalized for each of the following standard causes:
 - (a) Start-up;
 - (b) Shutdown;
 - (c) Control equipment failure;
 - (d) Process problems;
 - (e) Other known cause;
 - (f) Unknown cause.
- (4) The excess emissions and continuous monitoring system performance report shall include an attachment containing the following information:
 - (a) The magnitude of the six-minute periods during which emissions exceed 20 percent, including any conversion factor(s) used; date, starting and ending time, nature, cause, and corrective action taken for each excess emissions, and a specific identification of each period of excess emissions that occurred during start-ups, shutdowns, and malfunctions and the corrective action taken.
 - (b) The date, starting and ending times of each instance when any monitor was inoperative (except for zero and span checks, etc.), and the description of the nature, cause, and corrective action taken for each such period.

- b. The excess emissions and continuous monitoring systems reports shall be submitted no later than 30 days after the end of the monitoring period. The first monitoring period shall correspond to the calendar quarter when this permit is issued. Subsequent monitoring periods shall be as follows:
 - (1) Each quarter if the total duration of excess emissions is 1 percent or greater of the total operating time, or the total continuous monitoring system downtime is 5 percent or greater of the total operating time.
 - (2) Each semiannual period if the total duration of excess emissions for each quarter in the semiannual period is less than 1 percent of the total operating time and the continuous monitoring system downtime for each quarter in the semiannual period is less than 5 percent of the total operating time.

C. Control Device Monitoring and Maintenance Procedure:

[A.A.C R18-2-306(A)(3)]

1. Gravel Bed Filter and Cyclone

- a. Maintenance procedure of the gravel bed filter shall include:
 - (1) Inspection of the level of “pea gravel” in the bed of each of the ten modules;
 - (2) Inspection of the tipping gates under each module;
 - (3) Inspection of pneumatic isolating valves and lines;
 - (4) Inspection of the external drive system for the media rake;
 - (5) Inspection of proper cycling of each module;
 - (6) Inspection of poppet valves, hopper discharge gates, and the module rakes and screen sections;
 - (7) The Permittee shall record the various components of the system that have been inspected.
 - (8) Inspection of the media rake itself shall be completed at least once per year while the Kiln is not in operation.

2. Baghouse (fabric filter)

- a. Baghouse monitoring shall include:

Verification of the pulse timing sequence for the baghouse.

- b. Maintenance Procedure of the Baghouse Shall Include:
 - (1) Inspection of baghouse cleaning system and fan;
 - (2) Internal inspection of the baghouse components including bags, hoppers, and shell;
 - (3) The Permittee shall record the various components of the system that have been inspected.
- c. Sampling and analysis of representative bag samples. The analysis of representative bag samples shall be used as a factor in determining when bag replacement is scheduled. Any known broken bags shall be replaced or capped off until they can be replaced. Compartments with one or more broken bags shall be isolated until the broken bags can be replaced or capped off.

3. Wet Scrubber

- a. Wet Scrubber Monitoring Shall Include:
 - (1) Recording of differential pressure across the wet scrubber using an electronic pressure transmitter;
 - (2) Recording of water flow rate to the scrubber using a certified flow meter.
- b. Maintenance Procedure of the Wet Scrubber Shall Include:
 - (1) Inspection of the water nozzles (look for plugging from debris);
 - (2) Inspection of the motor and drive belts for the fan;
 - (3) Inspection of the water discharge path;
 - (4) Inspection of the screen section at the stack;
 - (5) The Permittee shall record the various components of the system that have been inspected.

- 4. If maintenance is required, the Permittee shall record details of the type of maintenance and the date the maintenance was performed. If maintenance is not required, the Permittee shall record the fact that maintenance is not required.

- D.** None of the permit conditions in this Attachment that are based on the PM10 STATE IMPLEMENTATION PLAN FOR THE PAUL SPUR GROUP I AREA, dated July 1990, prepared by the Office of Air Quality, Arizona Department of Environmental Quality, hereinafter also referred to as "PSSIP" shall be modified

or amended in any way without PSSIP being first amended to reflect or allow such a modification or amendment.

[Permit 0368-93 Attachment A, X(J)]

- E.** The following methods and procedures shall be used while conducting performance tests on equipment subject to Sections of Attachment “B”:
[A.A.C R18-2-720(H)]

1. The reference methods in 40 CFR 60, Appendix A shall be used as follows:
 - a. Method 5 for the measurement of particulate matter;
 - b. Method 1 for sample and velocity traverses;
 - c. Method 2 for velocity and volumetric flow;
 - d. Method 3 for gas analysis;
 - e. Method 4 for stack gas moisture;
 - f. Method 9 for visible emissions.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.85 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director.

II. CRUSHING AND SCREENING PLANT

This Section applies to equipment that is part of the crushing and screening plant.

A. Emission Units

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Crushing and Screening Plant		
Truck to Hopper 100	Limestone Material Transfer	Water Spray
Hopper 100 to Apron Feeder 101	Limestone Material Transfer	Water Spray
Primary Crusher 102	Crusher	DC-120
Primary Crusher 102 to Belt 103	Limestone Material Transfer	DC-120
Belt 103 to Primary Screen 104	Limestone Material Transfer	Enclosed

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Primary Screen 104	Screening	Enclosed
Cone Crush Belt 105 to O/S Conveyor 107	Limestone Material Transfer	None
Secondary Crusher 106	Crusher	DC-121
1st #3 SP Feed Belt 118 to 2nd #3 SP Feed Belt 119	Protected Limestone Material Transfer	Enclosed
2nd #3 SP Feed Belt 119 to #3 Kiln Feed Stockpile	Limestone Material Transfer	None
Short -2" Belt 108 to -2" Belt 109	Protected Limestone Material Transfer	Enclosed
Secondary Screen 110	Screening	DC-122
Reversible Chat Belt 113 to #2 Feed Belt 112	Protected Limestone Material Transfer	Enclosed
Reversible Chat Belt 113 to First Chat Belt 114	Protected Limestone Material Transfer	Enclosed
First Chat Belt 114 to Second Chat Belt 115	Protected Limestone Material Transfer	Enclosed
Second Chat Belt 115 to Chat Stockpile	Limestone Material Transfer	Enclosed
#2 Feed Belt 112 to #2 Kiln Feed Stockpile	Protected Limestone Material Transfer	Enclosed
#1 Feed Belt 111 to #1 Kiln Feed Stockpile	Limestone Material Transfer	Enclosed
SECO #1 Screen 124	Screening	Enclosed
2nd Flux Belt 117 to Flux Stockpile	Limestone Material Transfer	Water Spray
SECO #2 Screen 125	Screening	Enclosed
SECO #3 Screen 126	Screening	Enclosed
DC-120 to Screw Conveyor 127	Limestone Material Transfer	Sealed
DC-121 to Screw Conveyor 127	Limestone Material Transfer	Sealed
DC-122 to Screw Conveyor 127	Limestone Material Transfer	Sealed
Screw Conveyor 127 to Slurry Pond	Limestone Material Transfer	Water Spray

B. Particulate Matter (PM/PM10) and Opacity

1. Emission Limitations and Standards

- a. The opacity of any plume or effluent emanating from the emissions units listed under Condition II.A above, shall not

exceed 20 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[A.A.C R18-2-702(B)]

- b. The Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from each of the emission units listed in Condition II.A above, particulate matter in excess of the amounts calculated by the following equations:

[A.A.C R18-2-720(B)(2)]

- (1) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

[A.A.C

R18-2-306(A)(3)(c)]

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- (2) For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- (3) For the purposes of this permit, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C R18-2-720(D)]

2. Air Pollution Control

At all times when any Emission Unit listed in Condition II.A is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain and operate the associated control measure in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.

[A.A.C. R18-2-331(A)(3)(d) and (e)]

[PSSIP 6.5, and PSSIP 6.4]

[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting, Recordkeeping

a. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.A.2 of this Attachment, once every two weeks to monitor the opacity of emissions from the emissions units identified in Condition II.A.

b. The Permittee shall conduct a Control Device Maintenance Procedure, as defined in Condition I.C.2.a and b of Attachment "B", once every month to ensure proper operation of DC 120, DC 121, and DC 122.

[A.A.C R18-2-306(A)(3)(c)]

c. *The Permittee shall install, calibrate, maintain, and operate monitoring devices which can be used to determine daily the process weight of sand, gravel or crushed stone produced. The weighing devices shall have an accuracy of ± 5 percent over their operating range.*

[A.A.C. R18-2-331(A)(3)(c), -306.A.3, -722(F)]

[Material permit conditions are indicated by underline and italics]

d. The Permittee shall submit semiannual reports containing the following information along with the compliance certification required by Condition VII of Attachment "A":

(1) For each month, the number of days in which the crushing plant crushed rock.

(2) For each month, the quantity of rock (in tons) crushed by the crushing plant.

[Permit 0368-93 Attachment A, IX(A)(1)]

4. Permit Shield

Compliance with the terms of Section II of this Attachment shall be deemed compliance with A.A.C R18-2-702(B), A.A.C R18-2-720(B)(2), A.A.C R18-2-722(F), Permit 0368-93 Attachment A, IX(A)(1), PSSIP 6.5, and PSSIP 6.4

[A.A.C R18-2-325]

III. SOLID FUEL HANDLING SYSTEM NOT SUBJECT TO NSPS Y

This Section is applicable to equipment that is part of the Solid Fuel Handling System that is not marked as subject to NSPS Y.

A. Emission Units

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Solid Fuel Handling not Subject to NSPS Y		
Truck to Plaza Stockpile	Fuel Transfer Point	None
Truck to Lower Stockpile	Fuel Transfer Point	None
Loader to Truck	Fuel Transfer Point	None
Truck to Plaza Stockpile from Lower Stockpile	Fuel Transfer Point	None
Delivery Truck to Lower Stockpile	Fuel Transfer Point	None
Delivery Truck to Plaza Stockpile	Fuel Transfer Point	None
Loader to Mixed Stockpile	Fuel Transfer Point	None
Solid Fuel Bin 508 to Weigh Belt 509	Fuel Transfer Point	Enclosed
Weigh Belt 509 to Solid Fuel Mill 510 via Rotary Feeder	Fuel Transfer Point	Enclosed
Solid Fuel Mill 510	Fines Crushing	Sealed
Solid Fuel Mill 510 to Kiln 1 Burner Pipe	Fuel Transfer Point	Sealed
Solid Fuel Mill Rejects to Wheelbarrow	Fuel Transfer Point	None
Wheelbarrow to Reclaim	Fuel Transfer Point	None

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

- a. The opacity of any plume or effluent emanating from the emissions units listed under Condition III.A above shall not exceed 20 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[A.A.C R18-2-702(B)]

- b. The Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from the emissions units listed under Condition III.A above, particulate matter in excess of the amounts calculated by one of the following equations:

- (1) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- (2) For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

[A.A.C R18-2-716(B)]

2. Air Pollution Control

- a. *At all times when any Emission Unit listed in Condition III.A is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain and operate the associated control measure in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.*

[A.A.C. R18-2-331(A)(3)(d) and (e), -306.A.2]

[Material permit conditions are indicated by underline and italics]

- b. *To prevent particulate matter from becoming airborne, all conveyor belt transfer points shall be enclosed to the maximum extent possible, or be enclosed and controlled by using an exhaust system and dust collector, or be controlled by use of dust suppressant chemicals applied with sprays as approved by the Director.*

[A.A.C. R18-2-331(A)(3)(d) and (e)]

[PSSIP Condition 6.1]

[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting, Recordkeeping

The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.A.2 of this Attachment, once every two weeks to monitor the opacity of emissions from the emissions units identified in Condition III.A.

[A.A.C R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Section III of this Attachment shall be deemed compliance with A.A.C R18-2-702(B) and A.A.C R18-2-716(B).

IV. SOLID FUEL HANDLING SYSTEM SUBJECT TO NSPS Y REQUIREMENTS

This Section is applicable to all NSPS Y equipment that is part of the Solid Fuel Handling System marked as subject to NSPS Y as specified in Attachment “C”.

A. Emission Units

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Solid Fuel Handling Subject to NSPS Y		
Loaders to Coal and Coke Hoppers 503-1 & 503-2	Fuel Transfer Point	None
Coal and Coke Hoppers 503-1 & 503-2 to Weigh Feeders 504 & 505	Fuel Transfer Point	Enclosed
Solid Fuel Crusher 506	Fines Crushing	Enclosed
Solid Fuel Belt 507 to Solid Fuel Bin 508	Fuel Transfer Point	Enclosed
Solid Fuel Belt 507 to Solid Fuel Bin 515	Fuel Transfer Point	Enclosed
Solid Fuel Bin 515 to Weigh Belt 516	Fuel Transfer Point	Enclosed
Weigh Belt 516 to Solid Fuel Mill 517 via Rotary Feeder	Fuel Transfer Point	Enclosed
Solid Fuel Mill 517	Fuel Transfer Point	Sealed
Solid Fuel Mill 517 to Kiln 2 Burner Pipe	Fines Crushing	Sealed

B. Opacity

1. Emission Limitations and Standards

The opacity of any plume or effluent emanating from the emissions units listed under Condition IV.A above shall not exceed 20 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A. Emissions in excess of 20 percent opacity during periods of startup, shutdown, and malfunction shall not be considered a violation of the limit.

[A.A.C. R18-2-331(A)(3)(d) and (e)]
[40 CFR § 60.252(c), § 60.254(b)(2), § 60.8(c)]

[Material permit conditions are indicated by underline and italics]

2. Air Pollution Control

- a. *At all times when any Emission Unit listed in Condition IV.A above is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain and operate the associated control measure in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.*

[A.A.C. R18-2-331(A)(3)(d) and (e)]

[40 CFR § 60.11(d), A.A.C R18-2-306(A)(2)]

[Material permit conditions are indicated by underline and italics]

- b. *To prevent particulate matter from becoming airborne, all conveyor belt transfer points shall be enclosed to the maximum extent possible, or be enclosed and controlled by using an exhaust system and dust collector, or be controlled by use of dust suppressant chemicals applied with sprays as approved by the Director.*

[A.A.C. R18-2-331(A)(3)(d) and (e)]

[PSSIP Condition 6.1]

[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting, Recordkeeping

The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.A.2, once every two weeks to monitor the opacity of emissions from the emissions units identified in Condition IV.A.

[A.A.C R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Section IV.A of this Attachment shall be deemed compliance with 40 CFR § 60.252(c).

[A.A.C R18-2-325]

V. KILN 1 AND KILN 2 SYSTEM

This Section is applicable to all the equipment that is part of the Kiln 1 and Kiln 2 System except for the Kiln 2 Scalping Screen 224, which is covered separately under Section VI of Attachment “B”.

A. Emission Units

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Kiln 1 Stone Handling		
Kiln 1 Feed Stockpile to BC-205	Limestone Material Transfer	Underground
BC-205 to K1 Transfer Stockpile	Limestone Material Transfer	Enclosed

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
K1 Transfer Stockpile to BC-210	Limestone Material Transfer	Underground
Preheater Screen 211	Screening	Enclosed
Rotary Valve to Stone Bin 301	Limestone Material Transfer	Sealed
Kiln 1 Lime Handling		
Kiln 1 Stack	Stack Emissions	Gravel Bed Filter 309/Cyclone 307
Kiln 1 to Product Cooler 306	Lime Material Transfer	Enclosed
Product Cooler 306 to Lime Discharge Screw Conveyor 400	Lime Material Transfer	Enclosed
Lime Discharge Screw Conveyor 400 to BC-401	Lime Material Transfer	Enclosed
BC-401 to BC-402	Lime Material Transfer	Enclosed
BC-402 to BC-403	Lime Material Transfer	Dust Collector (DC-403)
DC-321 to Dust Bin BN-320	Lime Material Transfer	Sealed
DC-403 to BC-403	Lime Material Transfer	Sealed
Kiln 1 Dust Handling		
Gravel Bed Filters 309 to Center Screw 311	Lime Material Transfer	Sealed
Gravel Bed Filters 309 to Collect Drag 310	Lime Material Transfer	Sealed
Gravel Bed Filters 309 to Collect Drag 313	Lime Material Transfer	Sealed
Center Screw 311 to Cross Drag 312	Lime Material Transfer	Sealed
Collect Drag 310 to Cross Drag 312	Lime Material Transfer	Sealed
Cross Drag 312 to Collect Drag 313	Lime Material Transfer	Sealed
Collect Drag 313 to Dust Bucket Elevator 314	Lime Material Transfer	Sealed
Dust Bucket Elevator 314 to Dust Pod 315	Lime Material Transfer	Sealed
Dust Pod 315 to Screw 316	Lime Material Transfer	Sealed
Preheater Dribble to Dust Pod 308	Lime Material Transfer	Sealed
Kiln 1 Dust Chamber to Dust Pod 308	Lime Material Transfer	Sealed
Cyclone 307 to Dust Pod 308	Lime Material Transfer	Sealed
Dust Pod 308 to Screw 316	Lime Material Transfer	Sealed
Screw 316 to Screw 317	Lime Material Transfer	Sealed
Screw 317 to Screw 318	Lime Material Transfer	Sealed
Screw 318 to Bucket Elevator 319	Lime Material Transfer	Dust Collector (DC-321)
Bucket Elevator 319 to Dust Bin BN-320	Lime Material Transfer	Dust Collector (DC-321)
Dust Bin BN-320 to Pug Mill 323 via Rotary Valve	Lime Material Transfer	Sealed

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Dust Bin 320 to Haul Truck	Lime Material Transfer	Enclosed
Pug Mill 323 to Haul Truck	Lime Material Transfer	Water
Kiln 2 Stone Handling		
No. 1 Kiln Feed Stockpile to Crossover Tunnel Belt 215	Limestone Material Transfer	Underground
Crossover Tunnel Belt 215 to Crossover Belt 216	Limestone Material Transfer	Enclosed
Crossover Belt 216 to Crossover Belt 217	Limestone Material Transfer	Enclosed
Crossover Belt 217 to -2" Belt	Limestone Material Transfer	Enclosed
Crossover Belt 217 to Tunnel Belt 223	Limestone Material Transfer	Enclosed
No. 2 Kiln Feed Stockpile to Tunnel Belt 223	Limestone Material Transfer	Underground
Reject Screw 226 to Reject Belt 227	Limestone Material Transfer	Dust Collector (DC-228)
Reject Belt 227 to Chat Stockpile	Limestone Material Transfer	Water
BC-225 to Stone Bin 350	Limestone Material Transfer	Enclosed
Stone Bin 350 to Weigh Belt 351	Limestone Material Transfer	Enclosed
Weigh Belt 351 to Kiln 2	Limestone Material Transfer	Enclosed
DC-228 to Reject Belt 227	Limestone Material Transfer	Sealed
Kiln 2 Lime Handling		
Kiln 2 Stack	Stack Emissions	DC-356
Kiln 2 to Product Cooler 353	Lime Material Transfer	Enclosed
Product Cooler 353 to Vibrating Feeders 353	Lime Material Transfer	Enclosed
Vibrating Feeders 353 to BC-404	Lime Material Transfer	Dust Collector (DC-404)
DC-404 to BC-404		Sealed
Kiln 2 Dust Handling		
Kiln 2 Dust Chamber to Dust Screw 364	Lime Material Transfer	Sealed
Dust Screw 364 to Dust Screw 365	Lime Material Transfer	Sealed
Air/Air Heat Exchanger to HX Screw 361	Lime Material Transfer	Sealed
HX Screw 361 to HX Screw 363 via Rotary Valve	Lime Material Transfer	Sealed
HX Screw 363 to Dust Screw 360	Lime Material Transfer	Sealed
DC-356 to Screw 358	Lime Material Transfer	Sealed
DC-356 to Screw 359	Lime Material Transfer	Sealed
Screw 359 to Dust Screw 360	Lime Material Transfer	Sealed
Screw 358 to Dust Screw 360	Lime Material Transfer	Sealed
Dust Screw 360 to Dust Screw 365	Lime Material Transfer	Sealed

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Dust Screw 360 to Kiln 1 Dust Bin BN-320	Lime Material Transfer	DC-321
Dust Screw 360 to Kiln 3 Dust Blend System	Lime Material Transfer	Sealed
Dust Screw 360 to Bin T-410	Lime Material Transfer	DC-408
Bin T-410 to Screw 412	Lime Material Transfer	Sealed
Screw 412 to BC-404	Lime Material Transfer	Dust Collector DC-404
Dust Screw 365 to Bucket Elevator 366	Lime Material Transfer	Dust Collector DC-369
Bucket Elevator 366 to Tank Screw 367	Lime Material Transfer	Dust Collector DC-369
Tank Screw 367 to Kiln 2 Dust Bin BN-368	Lime Material Transfer	Dust Collector DC-369
Kiln 2 Dust Bin BN-368 to Truck	Lime Material Transfer	Dust Collector DC-369
Kiln 2 Dust Bin BN-368 to Pug Mill 371 via Rotary Valve	Lime Material Transfer	Sealed
Pug Mill 371 to Truck	Lime Material Transfer	Water
DC-408 to Bin T-410	Lime Material Transfer	Sealed
DC-369 to Kiln 2 Dust Bin BN-368	Lime Material Transfer	Sealed

B. General Requirements

1. Operating Requirements

a. Fuel Limitation Requirements for Kiln 1

The Permittee shall use only the following materials as fuels for Kiln 1:

- (1) natural gas;
- (2) fuel oil;
- (3) coal;
- (4) petroleum coke;
- (5) combination of (1) through (4).

[A.A.C R18-2-306(A)(2)]

b. Fuel Limitation Requirements for Kiln 2

[A.A.C R18-2-306(A)(2)]

The Permittee shall use only the following materials as fuels for Kiln 2 :

- (1) natural gas;
- (2) coal;

- (3) petroleum coke;
- (4) fuel oil;
- (5) on-specification used oil at a rate less than or equal to 20 gallons per hour;
- (6) combination of (1) through (5).

2. The Permittee shall only use on-specification used oil with contamination concentrations below the following levels:

- a. Arsenic - 5 parts per million;
- b. Cadmium - 2 parts per million;
- c. Chromium - 10 parts per million;
- d. Lead - 100 parts per million;
- e. PCB's - 2 parts per million;
- f. Total Halogens - 1000 parts per million.

[ARS § 49-801(2)]

3. Monitoring and Record Keeping Requirements

The Permittee shall maintain on record, copies of the fuel analyses for each batch of used oil, and shall ensure that the analysis conforms to the contamination levels specified in Condition V.B.2 above.

[ARS § 49-801(2)]

C. Particulate Matter (PM/PM10) and Opacity

1. Emission Limitations and Standards

- a. The opacity of any plume or effluent emanating from the emissions units listed under Condition V.A above shall not exceed 20 percent with the exception of Dust Bin BN-320 and Bucket Elevator 319 which shall not exceed 10 percent opacity, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[A.A.C R18-2-702(B)]

[Installation Permit 1233, Attachment B, II(B)(2)]

- b. The opacity of any plume or effluent emanating from either the Kiln 1 stack or the Kiln 2 stack shall not exceed 20 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[A.A.C R18-2-702(B)]

- c. The Permittee shall maintain damper seals for Kiln 1 in such a manner that fugitive emissions do not have opacity in excess of five percent as measured by EPA Reference Method 9.

[Permit 0368-93, Attachment A, X(A)(1)]

- d. The Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from Kiln 1 and Kiln 2 stacks combined, particulate matter in excess of the amounts calculated by one of the following equations:

[A.A.C R18-2-720(B)(1), A.A.C R18-2-720(D)]

- (1) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour from Kiln 1 and Kiln 2 stacks combined.

P = the process weight rate in tons-mass per hour.

- (2) For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour from Kiln 1 and Kiln 2 stacks combined.

P = the process weight rate in tons-mass per hour.

- (3) For the purposes of this permit Kiln 1 and Kiln 2 shall be treated as similar units employing a similar type process. The combined process weight rate through Kiln 1 and Kiln 2 shall be used to calculate the maximum allowable particulate emissions from Kiln 1 and Kiln 2 stacks combined.

- e. The Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from Kiln Reject Belt 227,

particulate matter in excess of the amounts calculated by one of the following equations:

[A.A.C R18-2-720(B)(1), A.A.C R18-2-720(D)]

- (1) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- (2) For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- f. The Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from the DC 403 stack, BC 404, Kiln 2 Dust Bin, and T-410 Bin, particulate matter in excess of the amounts calculated by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

[A.A.C R18-2-730(A)(1)(a)]

2. Air Pollution Control Requirements

- a. At all times that Kiln 1 is operated, the Permittee shall maintain and operate the Cyclone and the Gravel Bed Filter using good air pollution control practices to minimize particulate emissions.
[A.A.C. R18-2-331(A)(3)(e)]
[A.A.C R18-2-306(A)(2)]
[Material permit conditions are indicated by underline and italics]
- b. The Permittee shall continue to maintain and operate the Kiln 1 Dust Collector dust transfer and storage system including all screw conveyors, dust pods, and bucket elevators using good air pollution control practices to minimize particulate emissions.
[A.A.C. R18-2-331(A)(3)(e)]
[PSSIP 6.5]
[Material permit conditions are indicated by underline and italics]
- c. At all times that Kiln 2 is operated, the Permittee shall maintain and operate baghouse DC-356 using good air pollution control practices to minimize particulate emissions.
[A.A.C. R18-2-331(A)(3)(e)]
[Installation Permit 1201]
[Material permit conditions are indicated by underline and italics]
- d. The Permittee shall continue to maintain and operate the Kiln 2 Dust Collector dust transfer and storage system including all screw conveyors and bucket elevators to minimize particulate emissions.
[A.A.C. R18-2-331(A)(3)(d) and (e)] [PSSIP 6.5]
[Material permit conditions are indicated by underline and italics]
- e. At all times when any Emission Unit listed in V.A is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain and operate the associated control measure in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.
[A.A.C. R18-2-331(A)(3)(d) and (e), 306.A.2]
[PSSIP 6.5]
[Material permit conditions are indicated by underline and italics]
- f. Kiln 1 Pug Mill 323 and Kiln 2 Pug Mill 371 shall at all times be maintained in good working order and be operated as efficiently as practicable so as to minimize air pollutant emissions.
[A.A.C. R18-2-331(A)(3)(e)]
[Installation Permit 1233 Attachment A, III; Attachment B Condition III(A)]
[Material permit conditions are indicated by underline and italics]

- g. At all times that BC 403 is operated, the Permittee shall operate DC- 403. At all times that Dust Bin BN-320 and Bucket Elevator 319 are operated, The Permittee shall operate DC-321. DC-321 and DC-403 shall at all times be maintained in good working order and be operated as efficiently as practicable so as to minimize air pollutant emissions.

[A.A.C. R18-2-331(A)(3)(e)]

[A.A.C R18-2-306(A)(2), Installation Permit 1233, Attachment A, III; Attachment B, III(B)]
[Material permit conditions are indicated by underline and italics]

- h. At all times that Reject Belt 227, BC 404, Kiln 2 Dust Bin, and T-410 Bin are operated, The Permittee shall operate DC-228, DC-404, DC-369, and DC-408. DC-228, DC-404, DC-369 and DC-408 shall at all times be maintained in good working order and be operated as efficiently as practicable so as to minimize air pollutant emissions.

[A.A.C. R18-2-331(A)(3)(d) and (e)]

[A.A.C R18-2-306(A)(2), Permit 1001154]

[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting, and Recordkeeping

- a. The Permittee shall calibrate, maintain, and operate a continuous opacity monitoring system (COMS) to monitor and record the opacity of the gases discharged from Kiln 1 and Kiln 2. The span of this system shall be set at 70% opacity.

[A.A.C. R18-2-331(A)(3)(c)]

[A.A.C R18-2-720(F)]

[Material permit conditions are indicated by underline and italics]

- b. The Permittee shall calibrate the COMS in accordance with manufacturer's instructions on an annual basis. The Permittee shall record the date and time that the calibration was conducted.

[A.A.C R18-2-306(A)(3)(c)]

- c. The COMS for Kiln 1 and Kiln 2 shall meet the following requirements:

40 CFR 60, Appendix B, Performance Specification 1 "Specification and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources"

[A.A.C. R18-2-331(A)(3)(c), A.A.C. R18-2-306(A)(3)(c), & A.A.C. R18-2-313(d)(1)(a)]

[Material permit conditions are indicated by underline and italics]

- (1) Apparatus;
- (2) Installation Specifications;
- (3) Design and Performance Specifications;
- (4) Design Specifications Verification Procedure;

- (5) Performance Specifications Verification Procedure;
 - (6) Equations.
 - d. The Permittee shall comply with all applicable requirements for monitoring systems outlined in Appendix 9 of Arizona Administrative Code Title 18, Chapter 2, for the continuous monitoring system operated pursuant to Condition V.C.3.a of this Attachment.

[A.A.C R18-2-Appendix 9]
 - e. The Permittee shall maintain daily records of the amount of dust generated and disposed from Kiln 1 and Kiln 2.

[Installation Permit 1233, Attachment B, IV(1)]
 - f. The Permittee shall submit semiannual reports containing the following information along with the compliance certification required by Condition VII of Attachment "A":

[Permit 0368-93 Attachment A, IX(A)(2)]

 - (1) For each month, the number of days in which Kiln 1 and Kiln 2 produced lime.
 - (2) For each month, the quantity of lime (in tons) produced by Kiln 1, and the quantity of lime (in tons) produced by Kiln 2.
 - g. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.A.2 of this Attachment, once every two weeks to monitor the opacity of emissions from the Kiln 1 Preheater Screen 211, Kiln 1 Pug Mill 323, Kiln 2 Pug Mill 371, Kiln 1 Product Cooler 306, Kiln 2 Product Cooler 353, DC-228, DC-321, DC-369, DC-403, DC-404, and DC-408.

[A.A.C R18-2-306(A)(3)(c)]
 - h. The Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Condition I.C.2.a and b of this Attachment, once every month to ensure performance from DC-228, DC-321, DC-369, DC-403, DC-404, and DC-408.

[A.A.C R18-2-306(A)(3)(c)]
- 4. Testing Requirements
 - a. Except as provided in Condition V.C.4.b below, the Permittee shall conduct an annual performance test to measure the particulate matter emissions from the Kiln 1 stack and the Kiln 2 stack. The tests shall be performed in accordance with EPA Reference Method 5 in 40 CFR 60, Appendix A. Except as provided in Condition V.C.4.b below, the Permittee shall conduct the performance tests while firing solid fuel in Kiln 1 and Kiln 2.

The results of the test from Kiln 1 and Kiln 2 shall be combined and compared with the emission standard in Condition V.C.1.d.
[A.A.C R18-2-306(A)(3)(c)]

b. The Permittee is exempted from performing the tests listed in Condition V.C.4.a above if Kiln 1 or Kiln 2 is operated for less than:

(1) 30 days per year continuous operation, or

(2) 60 days per year cumulative operation.

[A.A.C R18-2-306(A)(3)(c)]

5. Permit Shield

Compliance with the terms of Section V of this Attachment shall be deemed compliance with A.A.C R18-2-702(B), A.A.C R18-2-720(D), A.A.C R18-2-720(F), A.A.C R18-2-730(A)(1)(a), A.A.C R18-2-Appendix 9, Installation Permit 1201, Installation Permit 1233 (Attachment B, Condition IV(1)), and Installation Permit 1233 (Attachment B, II(B)(2)) Permit 0368-93, PSSIP 6.5.

[A.A.C R18-2-325]

VI. NSPS OOO REQUIREMENTS FOR KILN 2 NON-METALLIC MINERAL PROCESSING

This Section applies to Kiln 2 Scalping Screen 224, which is subject to NSPS OOO.

Opacity

A. Emission Limits/Standards

The Permittee shall not cause to be discharged into the atmosphere, from Kiln 2 Scalping Screen 224, any fugitive emissions which exhibit opacity greater than 10 percent. For the purposes of this Condition, "fugitive emissions" shall have the meaning provided in 40 CFR §60.671 (Fugitive Emissions). EPA Reference Method 9 in 40 CFR 60, Appendix A shall be used to determine opacity. Emissions in excess of 10 percent opacity during periods of startup, shutdown, and malfunction shall not be considered a violation of the limit.

[A.A.C. R18-2-331(A)(3)(d) and (e)]

[40 CFR § 60.672(b), § 60.675(b)(2), § 60.8(c), 60.8(f)]

[Material permit conditions are indicated by underline and italics]

B. Air Pollution Control

At all times that the Kiln 2 Scalping Screen 224 is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall operate it with an enclosure in a manner consistent with good air pollution control practice to minimize particulate emissions from the screens.

[A.A.C. R18-2-331(A)(3)(e)]

[40 CFR § 60.11(d), PSSIP 6.4]

[Material permit conditions are indicated by underline and italics]

C. Monitoring, Reporting, Recordkeeping

The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.A.2, once every two weeks to monitor the opacity of emissions from the Kiln 2 Scalping Screen 224.

[A.A.C R18-2-306(A)(3)(c)]

D. Permit Shield

Compliance with the terms of Section VI of this Attachment shall be deemed compliance with 40 CFR § 60.672.

[A.A.C R18-2-325]

VII. KILN 1 AND KILN 2 LIME STORAGE AND TRUCK LOADOUT

This Section is applicable to all the equipment that is part of the Kiln 1 and Kiln 2 Lime Storage and Truck Loadout System.

A. Emission Units

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Kiln 1 & Kiln 2 Lime Storage and Truck Loadout		
BC-403 to Gate G-403	Lime Material Transfer	Dust Collector (DC-401)
Gate G-403 to Truck via Spout 403	Enclosed Truck/Rail Loading	Enclosed
Gate G-403 to Bin 401	Lime Material Transfer	Dust Collector (DC-401)
Gate G-403 to BC-405	Lime Material Transfer	Dust Collector (DC-401)
BC-404 to Gate G-404	Lime Material Transfer	Dust Collector (DC-401)
Gate G-404 to Truck via Spout 404	Enclosed Truck/Rail Loading	Enclosed
Gate G-404 to Bin 401	Lime Material Transfer	Dust Collector (DC-401)
Gate G-404 to BC-405	Lime Material Transfer	Dust Collector (DC-401)
BC-405 to Gate G-405	Lime Material Transfer	Dust Collector (DC-402)
Roll Crusher R-405	Fines Crushing	Dust Collector (DC-402)
Gate G-405 to Gate G-406	Lime Material Transfer	Sealed
Gate G-406 to Bin 405	Lime Material Transfer	Dust Collector (DC-406)
Gate G-406 to Screw 406	Lime Material Transfer	Sealed
Screw 406 to Bin 406	Lime Material Transfer	Sealed
Screw 406 to Bin 407 (Future)	Lime Material Transfer	Enclosed
Bin 406 to Screw 432	Lime Material Transfer	Sealed
Bin 407 to Screw 431 (Future)	Lime Material Transfer	Sealed

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Roll Crusher R-451	Fines Crushing	Dust Collector (DC-431)
BC-433 to Gate G-451	Lime Material Transfer	Dust Collector (DC-402)
Hammermill R452	Fines Crushing	Sealed
Gate G-451 to Screw 434	Lime Material Transfer	Dust Collector (DC-402)
Screw 434 to Bucket Elevator E-432	Lime Material Transfer	Dust Collector (DC-402)
Bucket Elevator E-432 to Gate G-434	Lime Material Transfer	Dust Collector (DC-402)
Gate G-434 to Bin 402	Lime Material Transfer	Dust Collector (DC-402)
Bin 402 to Bucket Elevator E-432	Lime Material Transfer	Dust Collector (DC-402)
Bin 402 to Truck via Spout 482	Enclosed Truck/Rail Loading	Dust Collector (DC-402)
Gate G-434 to Screw 435 (Future)	Lime Material Transfer	Sealed
Screw 435 to Bin 405 (Future)	Lime Material Transfer	Dust Collector (DC-406)
Bin 405 to Screw 441	Lime Material Transfer	Sealed
Screw 441 to Bucket Elevator E-441	Lime Material Transfer	Dust Collector (DC-402)
Bucket Elevator E-441 to Gate G-441	Lime Material Transfer	Dust Collector (DC-402)
Gate G-441 to Screw 406	Lime Material Transfer	Dust Collector (DC-406)
Gate G-441 to BC-486	Lime Material Transfer	Dust Collector (DC-486)
Bin 406 to BC-486	Lime Material Transfer	Dust Collector (DC-486)
Bin 407 to BC-485 (Future)	Lime Material Transfer	Dust Collector (DC-485)
BC-485 to BC-486 (Future)	Lime Material Transfer	Dust Collector (DC-486)
Screw 487 to BC-486	Lime Material Transfer	Dust Collector (DC-486)
BC-486 to Truck via Spout 486	Enclosed Truck/Rail Loading	Dust Collector (DC-487)
Bin 405 to BC-481 (Future)	Protected Lime Material Transfer	Dust Collector (DC-481)
BC-481 to BC-483 (Future)	Protected Lime Material Transfer	Enclosed
Screw 406 to Bin 405	Lime Material Transfer	Dust Collector (DC-406)
Gate G-434 to Bin 403	Lime Material Transfer	Dust Collector (DC-406)
Bin 403 to BC-483	Lime Material Transfer	Dust Collector (DC-482)
BC-483 to Truck via Spout 483	Enclosed Truck/Rail Loading	Dust Collector (DC-483)
Bin 401 to Front-End Loader	Lime Material Transfer	None
Front-End Loader to Truck	Lime Material Transfer	None
DC-401 to Bin 401	Lime Material Transfer	Sealed
DC-402 to Screw 434	Lime Material Transfer	Sealed
DC-406 to Bin 403	Lime Material Transfer	Sealed

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
DC-431 to BC-433	Lime Material Transfer	Sealed
DC-482 to BC-483	Lime Material Transfer	Sealed
DC-483 to Spout-483	Lime Material Transfer	Sealed
DC-486 to BC-486	Lime Material Transfer	Sealed
DC-487 to Screw 487	Lime Material Transfer	Sealed

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

- a. The opacity of any plume or effluent emanating from the emissions units listed under Condition VII.A above shall not exceed 20 percent opacity, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[A.A.C R18-2-702(B)]

- b. The Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from each of the emission units covered by Condition VII.A, particulate matter in excess of the amounts calculated by one of the following equations:

[A.A.C R18-2-730(A)(1)]

- (1) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- (2) For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- c. For the purposes of Condition VII.B.1.b above, the total process weight rate from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C R18-2-730(B)]

2. Air Pollution Control

- a. At all times when any Emission Unit listed in Condition VII.A above is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain and operate the associated control measure in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.

[A.A.C. R18-2-331(A)(3)(d) and (e), -306.A.2]

[PSSIP 6.5]

[Material permit conditions are indicated by underline and italics]

- b. Except as provided in Condition VII.B.2.e below, the Permittee shall operate dust collectors DC-401, DC-402, DC-406, DC-431, DC-481, DC-482, DC-483, DC-485, DC-486, and DC-487 at all times when the respective emission units they control are in operation. All dust collectors shall at all times be maintained in good working order and be operated as efficiently as practicable so as to minimize air pollutant emissions.

[A.A.C. R18-2-331(A)(3)(e)]

[Permit 1001605, Permit 1000376]

[Material permit conditions are indicated by underline and italics]

- c. Except as provided in Condition VII.B.2.e below, the Permittee shall operate DC-406 to control emissions from Bin 403.

[A.A.C. R18-2-331(A)(3)(e)]

[Installation Permit 1222]

[Material permit conditions are indicated by underline and italics]

- d. Except as provided in Condition VII.B.2.e below, the Permittee shall operate DC-483 to control emissions from Spout 483.

[A.A.C. R18-2-331(A)(3)(e)]

[Installation Permit 1222]

[Material permit conditions are indicated by underline and italics]

- e. The Permittee may temporarily shutdown, for repair purposes, a baghouse used to control particulate emissions from operating equipment provided the following conditions are met:

[A.A.C. R18-2-306(A)(2)]

- (1) The Permittee continues to comply with the applicable emission standards in Condition VII.B.1.b.
 - (2) The Permittee shall:
 - (a) Record the start time and date, anticipated downtime of the device, cause of the downtime, and proposed corrective action. If the anticipated downtime is in excess of two days, the Permittee shall report the anticipated downtime to ADEQ within 24 hours of the shutdown.
 - (b) Report to the Department within 24 hours if the downtime goes beyond the anticipated end of downtime.
 - (c) Record the end times and dates of the repair procedure.
 - (3) The Permittee keeps a record of the type of repair performed;
 - (a) For periods exceeding 12 hours, the Permittee conducts the following actions:
 - (b) Once every 24-hour period commencing from the time of initial shutdown, an EPA Reference Method 9 observation of the equipment being controlled by the relevant baghouse;
 - (c) A record of the time, date, location, and results of the EPA Reference Method 9 observations;
 - (d) If any of the EPA Reference Method 9 observations results indicate an exceedance of the applicable opacity standard, the Permittee reports the excess emissions in accordance with Condition XI of Attachment "A".
- f. *The Permittee shall operate seals to control visible emissions from Roll Crusher R451 and Hammermill R452.*
[A.A.C. R18-2-331(A)(3)(e), -306(A)(2)]
[Material permit conditions are indicated by underline and italics]
- g. *The Permittee shall operate seals or enclosures to control particulate emissions from Bin 406.*
[A.A.C. R18-2-331(A)(3)(e), -306(A)(2)]
[Material permit conditions are indicated by underline and italics]

- h. *The Permittee shall operate loading sleeves or enclosures to control particulate emissions from Drop Points into Trucks from Bins 401, 402, 403, 404, 405, 406, and 407.*

[A.A.C. R18-2-331(A)(3)(e), -306(A)(2)]

[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting and Recordkeeping

- a. The Permittee shall conduct a Visible Emission Observation Procedure, as defined in Condition I.A.2, once every two weeks to monitor the opacity of emissions from the emission units listed in Condition VII.A above.

[A.A.C R18-2-306(A)(3)(c)]

- b. The Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Condition I.C.2, once every month to ensure performance from the dust collectors DC-401, DC-402, DC-406, DC-431, DC-481, DC-482, DC-483, DC-485, DC-486, and DC-487 when in operation.

4. Permit Shield

Compliance with the terms of Section VII of this Attachment shall be deemed compliance with A.A.C R18-2-702(B) and A.A.C R18-2-730(A).

[A.A.C R18-2-325]

VIII. KILN 3 SYSTEM

This Section is applicable to all the equipment that is part of the Kiln 3 System.

A. Emissions Units

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Kiln 3 Stone Handling		
#3 Kiln Feed Stockpile to Vibrating Feeders	Limestone Material Transfer	Underground
Vibrating Feeders to Reclaim Belt	Limestone Material Transfer	Underground
Stone Screen	Screening	DC-241
Stone Screen to Truck or Temporary Stockpile	Limestone Material Transfer	None
Stone Bin to Vibrating Feeder	Protected Limestone Material Transfer	Enclosed
Vibrating Feeder to Belt Conveyor	Protected Limestone Material Transfer	Enclosed
Belt Conveyor to Weigh Hopper	Protected Limestone Material Transfer	Enclosed

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
Weigh Hopper to Skip Hoist	Limestone Material Transfer	DC-241
Skip Hoist to Stone Hopper	Protected Limestone Material Transfer	Enclosed
Stone Hopper to Kiln 3	Limestone Material Transfer	Sealed
DC-241 to Discharge Pipe	Lime Material Transfer	Sealed
Kiln 3 Lime Handling		
Vibrating Feeders to Product Belt	Lime Material Transfer	DC-850
Vibrating Feeders to Reject Conveyor	Lime Material Transfer	DC-850
Reject Conveyor to Truck	Lime Material Transfer	None
Lime Crusher	Fines Crushing	DC-851
Lime Screen	Screening	DC-852
Bucket Elevator to Large Bin	Lime Material Transfer	DC-852
Large Bin to Recirculating Conveyor	Protected Lime Material Transfer	None
DC-775 to Product Conveyor	Lime Material Transfer	Sealed
DC-776 to Product Conveyor	Lime Material Transfer	Sealed
DC-852 to Large Bin	Lime Material Transfer	Sealed
Kiln 3 Stack (Shaft 1 & 2)	Stack Emissions	DC-600 (Wet Scrubber)
Kiln 3 Dust Handling		
Kiln 3 Exhaust to Wet Scrubber DC-600	Lime Material Transfer	Sealed
Wet Scrubber DC-600 to Discharge Pipe	Lime Material Transfer	Sealed
Discharge Pipe to Settling Pond	Lime Material Transfer	Water
Kiln 3 Lime Storage and Truck Rollout		
Large Bin to Truck Belt	Lime Material Transfer	DC-854
Large Bin to Rail Belt	Lime Material Transfer	DC-779
Small Bin to Truck Belt	Protected Lime Material Transfer	Enclosed
Small Bin to Rail Belt	Lime Material Transfer	DC-779
Dust Blend System Bin to Rotary Air Lock	Lime Material Transfer	Sealed
Rotary Air Lock to Screw Conveyor	Lime Material Transfer	Sealed
Screw Conveyor to Truck Belt	Lime Material Transfer	DC-854
Screw Conveyor to Rail Belt	Lime Material Transfer	DC-779
Rail Belt to Rail Car	Enclosed Truck/Rail Loading	None
Truck Belt to Truck	Enclosed Truck/Rail Loading	DC-853
DC-730 to Dust Blend System Bin	Lime Material Transfer	Sealed

Emission Unit/Affected Source Name	Emission Unit/ Affected Source Description	Control Measure (Control Device ID number)
DC-853 to Truck Belt	Lime Material Transfer	Sealed
DC-779 to Rail Belt	Lime Material Transfer	Sealed
DC-854 to Truck Belt	Lime Material Transfer	Sealed

B. Fuel Limitation Requirement

The Permittee shall only fire natural gas or fuel oil as fuels in Kiln 3.

[EPA Installation Permit issued August 31, 1978]

C. Particulate Matter and Opacity

1. Emission Limitations and Standards

- a. The opacity of any plume or effluent emanating from the emissions units listed under Condition VIII.A above shall not exceed 20 percent opacity, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[A.A.C R18-2-702(B)]

- b. The Permittee shall not discharge or cause the discharge into the atmosphere particulate matter in excess of five (5) pounds per hour, maximum two (2) hour average from the Kiln 3 and wet scrubber DC 600 system.

[EPA Installation Permit issued August 31, 1978, Condition VIII(B)]

- c. The Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from each of the emission units listed in Condition VIII.A, including the Kiln 3 stack, particulate matter in excess of the amounts calculated by one of the following equations:

- (1) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- (2) For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the

maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

[A.A.C R18-2-730(A)(1), -722(B), -720(B)]

- d. For the purposes of Condition VIII.C.1.c above, the total process weight rate from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C R18-2-730(B), -720(D)]

- e. The Permittee shall maintain damper seals for Kiln 3 in such a manner that fugitive emissions do not have opacity in excess of five percent as measured by EPA Reference Method 9.

[PSSIP 6.4, Permit 0368-93, Attachment A, X(A)(1)]

2. Air Pollution Control

- a. *At all times when any Emission Unit listed in Condition VIII.A is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain and operate the associated control measure in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.*

[A.A.C. R18-2-331(A)(3)(d) and (e), -306.A.2]

[PSSIP 6.4]

[Material permit conditions are indicated by underline and italics]

- b. *All equipment, facilities, or systems installed or used to achieve compliance with Condition VIII.C.1.c above shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions.*

[A.A.C. R18-2-331(A)(3)(d) and (e)]

[EPA Installation Permit issued August 31, 1978]

[Material permit conditions are indicated by underline and italics]

- c. The Permittee shall maintain the Kiln 3 damper seals pursuant to PSSIP 6.4.

[PSSIP 6.4]

3. Monitoring, Reporting, Recordkeeping

- a. The Permittee shall conduct a Visible Emission Observation Procedure, as defined in Condition I.A.2 of this Attachment, once every two weeks to monitor the opacity of emissions from the emission units listed in VIII.A.

[A.A.C R18-2-306(A)(3)(c)]

- b. The Permittee shall maintain, and operate an electronic pressure transmitter, in accordance with manufacturer's specifications, to monitor and record the differential pressure across the Kiln 3 wet scrubber.

[A.A.C. R18-2-306(A)(2)]

- c. The Permittee shall maintain, and operate a certified flow meter, in accordance with manufacturer's specifications, to monitor and record the water flow rate into the Kiln 3 wet scrubber.

[A.A.C. R18-2-306(A)(2)]

- d. The Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Conditions I.C.2 and I.C.3 of this Attachment, once every month to ensure proper operation of the dust collectors DC-241, DC-730, DC-775, DC-776, DC-779, DC-852, DC-853, DC-854,.

[A.A.C R18-2-306(A)(3)(c)]

- e. *The Permittee shall calibrate the electronic pressure transmitter and water flow meter at least on an annual basis. The Permittee shall keep records of the date when such calibration was performed. The Permittee shall also keep a record of the procedures used to calibrate the devices and the results of the calibration.*

[A.A.C. R18-2-331(A)(3)(c), -306(A)(3)(c)]

[Material permit conditions are indicated by underline and italics]

- f. The Permittee shall submit semiannual reports containing the following information along with the compliance certification required by Section VII of Attachment "A":

(1) For each month, the number of days in which Kiln 3 produced lime.

(2) For each month, the quantity of lime (in tons) produced by Kiln 3.

[Permit 0368-93, Attachment A, IX(A)(2)]

4. Testing

- a. Except as provided in Condition VIII.C.4.d below, the Permittee shall conduct an annual performance test to measure the opacity of emissions from Kiln 3 stack. The test shall be conducted in

accordance with EPA Reference Method 9 in 40 CFR 60, Appendix A.

[A.A.C R18-2-306(A)(3)(c)]

- b. Except as provided in Condition VIII.C.4.d below, the Permittee shall conduct an annual performance test to measure the particulate matter emissions from Kiln 3 stack. The test shall be performed in accordance with EPA Reference Method 5 in 40 CFR 60, Appendix A. The Permittee shall conduct the performance tests while firing natural gas in Kiln 3.

[A.A.C R18-2-306(A)(3)(c)]

- c. The Permittee shall conduct performance tests for particulate matter as specified by the Environmental Protection Agency. Performance tests shall be conducted and reported in accordance with the test methods set forth in Parts 60.8 and 60.344 (test Methods and procedures) of the Standards of Performance for New Stationary Sources (40 CFR 60) or alternative methods approved by the EPA. The EPA shall be notified at least 30 days in advance of such tests to allow an observer to be present.

[EPA Installation Permit issued August 31, 1978]

- d. The Permittee is exempted from performing the tests listed in Conditions VIII.C.4.a and VIII.C.4.b if Kiln 3 is operated for less than:

(1) 30 days per year continuous operation or

(2) 60 days per year cumulative operation.

[A.A.C R18-2-306(A)(3)(c)]

5. Permit Shield

Compliance with the terms of Section VIII of this Attachment shall be deemed compliance with A.A.C R18-2-702(B), A.A.C R18-2-720(B), A.A.C R18-2-730(A)(1), EPA Installation Permit (issued August 31, 1978) Condition VIII(B), and PSSIP 6.4.

[A.A.C R18-2-325]

IX. INTERNAL COMBUSTION ENGINES

This Section applies to the Stationary Internal Combustion Engines.

A. Particulate Matter and Opacity

1. Emission Limitations and Standards

- a. The Permittee shall not cause or allow to be discharged into the atmosphere from the stack(s) particulate matter in excess of the amount calculated by the following equation:

[A.A.C. R18-2-719.C.1]

$$E = 1.02Q^{0.769}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour

Q = the heat input in million Btu per hour

- b. For the purposes of the calculations required in Condition IX.A.1.a above, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units at a plant or premises shall be used for determining the maximum allowable amount of particulate matter, which may be emitted.

[A.A.C. R18-2-719.B]

- c. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any engine, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

[A.A.C. R18-2-719.E]

2. Monitoring, Recordkeeping and Reporting Requirements

- a. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from each engine stack when the engine is in operation. If the machinery is not in operation at the time of survey, the Permittee does not have to set it into operation to conduct the survey. Instead the Permittee shall document that the machinery was not in operation. If the opacity of the emissions observed appears to exceed the opacity limit, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date and time of observation/survey, and the results of the survey/observation. If the observation shows a Method 9 opacity reading in excess of the opacity limit, the Permittee shall take corrective action and keep records of all such actions. Any exceedance shall be reported as excess emissions in accordance with Section XI of Attachment "A".

[A.A.C. R18-2-306.A.3.c, .306.A.4.a and 306.A.5]

- b. The Permittee shall keep records of a current, valid purchase contract, tariff sheet or transportation contract. These records or other documentation shall contain information regarding the

lower heating value of the fuel. These records shall be made available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c and 306.A.4.a]

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-719.B, -719.C.1 and -719.E.

[A.A.C. R18-2-325]

B. Sulfur Dioxide

1. Emission Limitations and Standards

The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu heat input

[A.A.C. R18-2-719.F]

2. Recordkeeping and Reporting Requirements

a. The Permittee shall keep records of fuel supplier certifications or other documentation listing the sulfur content to demonstrate compliance with the sulfur content limit specified in Condition IX.B.1 of this Attachment. These records shall be made available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c and -719.I]

b. The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8%.

[A.A.C. R18-2-719.J]

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-719.F, -719.H, -719.I, and -719.J.

[A.A.C. R18-2-325]

C. Hazardous Air Pollutants

1. General Requirements

a. The Permittee shall operate and maintain at all times the engine including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

[40 CFR 63.6605(b)]

b. The Permittee shall minimize the engine time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30

minutes, after which time the emission standards applicable to all times other than startup in shall apply.

[40 CFR 63.6625(h)]

2. Operating Requirements

- a. The Permittee shall operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e)]

- b. The Permittee shall comply with the following operation and maintenance requirements:

[40 CFR 63.6603(a), and 40 CFR 63, Subpart ZZZZ, Table 2d]

- (1) The Permittee shall change the oil and filter every 1,000 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described below shall be completed. The oil analysis shall be performed at the same frequency specified for changing the oil.

[40 CFR 63.6625(i) and (j), and 40 CFR Table 2d of Subpart ZZZZ]

- (a) The Permittee shall at a minimum analyze the following three parameters: Total Acid Number, viscosity and water content. The condemning limits for these parameters are as follows:

- (i) Total Base Number is less than 30 percent of the Total Base Number of the oil when new,
- (ii) Viscosity has changed more than 20 percent from the viscosity of oil when new;
- (iii) Water Content is greater than 0.5 percent by volume.

- (b) If all of the above limits are not exceeded, the Permittee is not required to change the oil. If any of the above limits are exceeded, the Permittee shall change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later. Records must be kept of the parameters that are

analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the operation of the engine.

- (2) Every 1,000 hours of operation or annually, whichever comes first, the Permittee shall inspect and replace air cleaner as necessary.

[40 CFR 63, Subpart ZZZZ, Table 2d]

- (3) Every 500 hours of operation or annually, whichever comes first, the Permittee shall inspect all hoses and belts and replace as necessary.

[40 CFR 63, Subpart ZZZZ, Table 2d]

c. Continuous Compliance Requirements

The Permittee shall demonstrate continuous compliance by operating and maintaining the engine according to the manufacturer's emission-related operation and maintenance instructions; or by developing and follow its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions

[Table 6 to 40 CFR 63 Subpart ZZZZ]

3. Notification Requirements

The Permittee shall submit all applicable notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h).

[40 CFR 6645(a)(2) and (a)(5)]

4. Recordkeeping Requirements

- a. The Permittee shall keep the following records:

[40 CFR 63.6655(a)]

- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv);
- (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment;
- (3) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii);

- (4) Records of all required maintenance performed on the air pollution control and monitoring equipment; and
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition IX.C.1.a, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (6) The Permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that, the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the Permittee's own maintenance plan.
[40 CFR 63.6655(e)]

X. GASOLINE STORAGE TANKS

A. Standards and Limitations

1. All gasoline storage tanks shall be equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions.
[A.A.C. R18-2-710.B]
2. All pumps and compressors which handle volatile organic compounds (VOCs) shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere.
[A.A.C. R18-2-710.D]
3. *The Permittee shall install, operate and maintain gasoline storage tanks in accordance with manufacturer's specifications.*
[A.A.C. R18-2-306.A.2 and -331.A.3.e]
[Material Permit Conditions are indicated by underline and italics]

B. Monitoring and Recordkeeping Requirements

[A.A.C. R18-2-710.E]

1. The Permittee shall maintain a storage tank log showing the following:
 - a. The Permittee shall maintain a file of each type of petroleum liquid stored, the typical Reid vapor pressure of the petroleum liquid stored and the dates of storage. Dates on which the storage vessel is empty shall be shown.
 - b. The Permittee shall determine and record the average monthly storage temperature and true vapor pressure of the petroleum liquid stored at such temperature if either:

- (1) The petroleum liquid has a true vapor pressure, as stored, greater than 26 mm Hg (0.5 psia) but less than 78 mm Hg (1.5 psia) and is stored in a storage vessel other than one equipped with a floating roof, a vapor recovery system or their equivalents; or
 - (2) The petroleum liquid has a true vapor pressure, as stored, greater than 470 mm Hg (9.1 psia) and is stored in a storage vessel other than one equipped with a vapor recovery system or its equivalent.
- c. The average monthly storage temperature shall be an arithmetic average calculated for each calendar month, or portion thereof, if storage is for less than a month, from bulk liquid storage temperatures determined at least once every seven days.
- d. The true vapor pressure shall be determined by the procedures in American Petroleum Institute Bulletin 2517, amended as of February 1980 (and no future editions), which is incorporated herein by reference and on file with the Office of the Secretary of State. This procedure is dependent upon determination of the storage temperature and the Reid vapor pressure, which requires sampling of the petroleum liquids in the storage vessels. Unless the Director requires in specific cases that the stored petroleum liquid be sampled, the true vapor pressure may be determined by using the average monthly storage temperature and the typical Reid vapor pressure. For those liquids for which certified specifications limiting the Reid vapor pressure exist, the Reid vapor pressure may be used. For other liquids, supporting analytical data must be made available upon request to the Director when typical Reid vapor pressure is used.

C. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-710.B, D and E.1.

[A.A.C. R18-2-325]

XI. GASOLINE DISPENSING FACILITIES

A. Applicability

1. This Section applies to each gasoline dispensing facility (GDF) that is located at the source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

[40 CFR 63.1111(a)]
2. This Section applies to gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or

existing gasoline dispensing facilities located at an area source. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this Section.

[40 CFR 63.11112(a)]

3. In the event that any of the GDFs become subject to the control requirement of higher average monthly throughput, the Permittee:

- a. Shall, within 90 days, send a notification about the date such a change has occurred in the particular GDF, and

[A.A.C. R18-2-306.A.5]

- b. Shall comply with the new applicable standards of 40 CFR 63 Subpart CCCCCC no later than 3 years after the affected GDFs becomes subject to the new control requirements.

[40 CFR 63.11113 (c)]

4. Definition of Monthly Throughput

Monthly throughput is the total volume of gasoline that is loaded into all gasoline storage tanks during a month, as calculated on a rolling 30-day average.

[40 CFR 63.11132]

5. The equipment associated with this Section is subject to the NESHAP General Provisions, as described in Table 3 to 40 CFR 63 Subpart CCCCCC.

[40 CFR 63.11130]

B. Operating Limitations

1. GDFs with less than 10,000 gallons throughput per month.

- a. The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- b. Minimize gasoline spills;

- c. Clean up spills as expeditiously as practicable;

- d. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a cover having a gasketed seal when not in use;

- e. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 CFR 63.11116(a) and 63.11117(a)]

2. GDFs with more than 10,000 gallons but less than 100,000 gallons throughput per month.

- a. The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- (1) Minimize gasoline spills;
- (2) Clean up spills as expeditiously as practicable;
- (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a cover having a gasketed seal when not in use;
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 CFR 63.11116(a) and 63.11117(a)]

- b. Submerged Fill Pipes

The Permittee shall load gasoline into storage tanks by utilizing submerged filling.

- (1) The submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the storage tank.

[40 CFR 63.11117(b)(1)]

- (2) The submerged fill pipes installed on or after November 9, 2006, must be no more than 6 inches from the bottom of the storage tank.

[40 CFR 63.11117(b)(2)]

- c. The Permittee shall have records available within 24 hours of a request by the Director to document the gasoline throughput.

[40 CFR 63.11117(d)]

- d. If any of the GDFs referenced above becomes subject to additional control measures in 40 CFR 63 Subpart CCCCCC, the Permittee shall comply with the applicable provisions within 3 years of the GDF unit becoming subject to the new control requirements.

[40 CFR 63.11113(c)]

C. Recordkeeping Requirements

The Permittee shall maintain a monthly log of the throughput of the storage tank.

[A.A.C. R18-2-306.A.3.c]

D. Permit Shield

[A.A.C. R18-2-325]

Compliance with Section XI.D shall be deemed compliance with 40 CFR 63.11111(a), 40 CFR 63.11111(b), 40 CFR 63.11111(c), 63.11112(a), 63.11113(b) & (c), 63.11116(a), 40 CFR 63.11117(a), (b)(1), (b)(2), (c), & (d), 63.11132, and A.A.C. R18-2-710.B, D, E.1, E.2.b, E.3 & E.4.

XII. ALTERNATE OPERATING SCENARIOS

Pursuant to A.A.C R18-2-306(A)(11), this Section contains terms and conditions for reasonably anticipated alternate operating scenarios.

A. Alternate Operating Scenario 1 (AOS-1)

1. Definition of AOS-1

Under AOS-1, the Permittee will suspend quarry, crushing, and kiln operations. All process equipment not in operation will be maintained in good operating order which will require periodic, temporary operation to perform maintenance. This maintenance will involve mechanical operation of the equipment without any process material.

The lime handling systems for Kilns 1, 2, and 3 will be used as a transfer terminal under AOS-1. Process rates for the lime handling will be 400 tons per day and 50,000 tons per year. Lime will be received and shipped via trucks. All truck traffic will be on paved roads except for an unpaved section leading to the Kiln 3 lime storage silos. Other vehicular traffic will consist of security personnel patrolling the plant 8 to 12 times per day, US Border Patrol manning posts and maintenance personnel occasionally traveling to various locations within the plant.

2. Process Equipment

Activities and equipment subject to Attachment "B" Section I, Section III, Section IV, the lime handling portion of Section V, Section VII, the lime handling portion of Section VIII, Section IX, Section X, Section XI, Section XIV and Section XV will remain in operation during AOS-1. All other activities and equipment shall not be operated except for maintenance, as described in Attachment "B" Condition XII.A.1.

3. Emission Limits/Standards

All emission limits and standards stated in Attachment "B" - Conditions I through XV of this permit remain effective during AOS-1.

4. Monitoring, Reporting, and Recordkeeping

- a. The Permittee shall notify ADEQ within 30 days of a transition into AOS-1. The notification shall include an estimate of the anticipated duration of AOS-1.
- b. The Permittee shall record the dates and times of actual transition into AOS-1. The Permittee shall make a record of all equipment whose operations have been suspended. The Permittee shall provide a copy of these records to ADEQ within 7 days.
- c. All monitoring and recordkeeping requirements in Attachment “B” and the Housekeeping Plan in Attachment “D” shall remain implemented while operating under AOS-1. However, monitoring for the inactive areas may be suspended and corresponding recordkeeping shall indicate that the equipment is temporarily shutdown while operating under AOS-1.
- d. The Permittee shall provide a 30-day advance notice to ADEQ before reactivating any process that has been shut down during AOS-1.
- e. The Permittee shall ensure that all COMs and other monitoring gauges are re-calibrated and re-certified before reactivation of process equipment. Re-certification shall be conducted in accordance with a protocol pre-approved by the Director. The Permittee shall notify ADEQ of monitor re-certification 14 days in advance, and maintain on record all documents pertaining to re-certification.
- f. The Permittee shall record the dates and times that equipment are reactivated. The Permittee shall provide a notification to ADEQ within 7 days of reactivation.

B. Alternate Operating Scenario 2 (AOS-2)

1. Definition of AOS-2

Under AOS-2, all daily operations at the quarry and lime plant will be in “Care and Maintenance” mode. During this operating scenario, all equipment will be maintained in good operating order, which will require periodic, temporary operation to perform maintenance. This maintenance will involve mechanical operation of the equipment, but without any process material.

Mobile traffic will consist of security personnel patrolling the plant site 8 to 12 times per day, US Border Patrol and maintenance personnel occasionally traveling to various locations within the plant.

2. Process Equipment

All process activities shall cease and equipment shall not be operated except for maintenance, as described in Condition XV.B.1 above.

3. Emission Limits/Standards

All emission limits and standards stated in Attachment “B” - Sections I through XV of this permit remain effective during AOS-2.

4. Monitoring, Reporting, and Recordkeeping

- a. The Permittee shall notify ADEQ within 30 days of a transition into AOS-2. The notification shall include an estimate of the anticipated duration of AOS-2.
- b. The Permittee shall record the dates and times of actual transition into AOS-2. The Permittee shall make a list, and make a record, of all equipment whose operations have been suspended. The Permittee shall provide a copy of these records to ADEQ within 7 days.
- c. All monitoring and recordkeeping requirements in Attachment “B” and the Housekeeping Plan in Attachment “D” shall remain implemented while operating under AOS-2. However, monitoring for the inactive areas may be suspended and corresponding recordkeeping shall indicate that the equipment is temporarily shut-down while operating under AOS-2.
- d. The Permittee shall provide a 30-day advance notice to ADEQ before reactivating any process that has been shut down during AOS-1 or 2, or transitioning from AOS-2 into AOS-1.
- e. The Permittee shall ensure that all COMs and other monitoring gauges are re-calibrated and re-certified before reactivation of process equipment. Re-certification shall be conducted in accordance with a protocol pre-approved by the Director. The Permittee shall notify ADEQ of monitor re-certification 14 days in advance, and maintain on record all documents pertaining to re-certification.
- f. The Permittee shall record the dates and times that equipment are reactivated. The Permittee shall provide a notification to ADEQ within 7 days of reactivation.

C. Alternate Operating Scenario 3 (AOS-3)

1. Definition of AOS-3

AOS-3 entails the startup and operation of one or more process areas. For any given process area that is brought into operation, all initial monitoring and recordkeeping as originally required under normal operations will be

followed to demonstrate compliance with the applicable requirements for each process area.

2. Emission Limits/Standards

All emission limits and standards stated in Attachment “B” - Sections I through XV of this permit remain effective during AOS-3.

3. Monitoring, Reporting, and Recordkeeping

- a. The Permittee shall notify ADEQ 30 days in advance of a transition into AOS-3. The notification shall include an estimate of the anticipated duration of AOS-3.
- b. The Permittee shall record the dates and times of actual transition into AOS-3. The Permittee shall make a list, and make a record, of all equipment whose operations have been started up. The Permittee shall provide a copy of these records to ADEQ within 7 days.
- c. All monitoring and recordkeeping requirements in Attachment “B” and the Housekeeping Plan in Attachment “D” shall remain implemented while operating under AOS-3. However, monitoring for the inactive areas may be suspended and corresponding recordkeeping shall indicate that the equipment is temporarily shut-down while operating under AOS-3.
- d. The Permittee shall ensure that all COMs and other monitoring gauges are re-calibrated and re-certified before reactivation of process equipment. Re-certification shall be conducted in accordance with a protocol pre-approved by the Director. The Permittee shall notify ADEQ of monitor re-certification 14 days in advance, and maintain on record all documents pertaining to re-certification.
- e. The Permittee shall record the dates and times when equipment are reactivated. The Permittee shall provide a notification to ADEQ within 7 days.

XIII. COMPLIANCE ASSURANCE MONITORING (CAM)

[40 CFR §64]

The CAM required under this Section applies to Kiln 1, Kiln 2, and Kiln 3 for the control of particulate matter.

A. CAM Plan for KILN 1 Gravel Bed Filter

1. Primary Indicators

The primary indicators of the gravel bed filter performance shall be as follows:

- a. COMS Opacity Readings;
 - b. Control device maintenance procedure as defined in Condition I.C.1.a of this Attachment.
2. Monitoring, Reporting, and Recordkeeping Requirements
- a. COMS Requirements
 - (1) A COMS shall be used to monitor opacity. The COMS shall be installed and operated in accordance with the requirements specified in Condition V.C.3 of this Attachment.
 - (2) Using COMS data, the Permittee shall calculate block 1-hour average opacities comprised of individual six minute averages excluding periods of startup, shutdown, and malfunction.

[A.A.C. R18-2-306.A.3.c]
 - (3) The Permittee shall maintain a record of calibration and maintenance of the monitoring systems in accordance with Section XII of Attachment "A" of this permit.

[A.A.C. R18-2-306.A.3.c]
 - b. Maintenance Procedure Requirements

[A.A.C. R18-2-306.A.3.d]

The Permittee shall visually inspect the gravel bed filter for deterioration on a monthly basis, only during months when Kiln 1 has been operating, in accordance with Condition I.C.1.a of this Attachment. The results of the visual inspections shall be recorded.
3. Excursion Determination
- a. An excursion is defined as:
 - (1) Block 1-hour average opacity of 15% or greater. For any such excursion event, the Permittee shall initiate a mandatory investigation within 30 minutes, including inspection of the gravel bed filter in accordance with Condition I.C.1.a of this Attachment. The Permittee shall keep records of the investigation conducted with details of any corrective action taken.

[A.A.C. R18-2-306.A.3.c]
 - (2) Failure to perform monthly maintenance procedure on the gravel bed filter during months that Kiln 1 has operated..

[A.A.C. R18-2-306.A.3.c]

- b. If an excursion is detected, then the Permittee shall initiate an investigation of the gravel bed filter within 24 hours of the first discovery of the excursion incident and take corrective action as soon as practicable to adjust or repair the gravel bed filter to minimize possible exceedances of the particulate matter standard established in Condition V.C.1.d of this Attachment.

[A.A.C. R18-2-306.A.3.c]

- c. In the case of any excursion incident, the record shall include an identification of the date and time of the excursion, its cause, and an explanation of the corrective actions taken, if any.

[40 CFR §64.9]

B. CAM Plan for KILN 2 Baghouse

1. Primary Indicators

- a. COMS opacity readings
- b. Control device maintenance procedure as defined in Condition I.C.2 of this Attachment.

2. Monitoring, Reporting, and Recordkeeping Requirements

a. COMS Requirements

- (1) A COMS shall be used to monitor opacity. The COMS shall be installed and operated in accordance with the requirements specified in Condition V.C.3 of this Attachment.

[A.A.C. R18-2-306.A.3.c]

- (2) Using COMS data, the Permittee shall calculate block 1-hour average opacities comprised of individual six minute averages excluding periods of startup, shutdown, and malfunction.

[A.A.C. R18-2-306.A.3.c]

- (3) The Permittee shall maintain a record of calibration and maintenance of the monitoring systems in accordance with Section XII of Attachment "A" of this permit.

[A.A.C. R18-2-306.A.3.c]

b. Maintenance Procedure Requirements

[A.A.C. R18-2-306.A.3.d]

The Permittee shall conduct a control device maintenance procedure that includes an internal inspection of the baghouse including bag sampling in accordance with Condition I.C.2 of this Attachment to be performed during a scheduled major outage, at least once per year.

c. Excursion Determination

(1) An excursion is defined as:

- (a) Block 1-hour average opacity of 10% or greater. For any such excursion event, the Permittee shall initiate a mandatory investigation within 30 minutes, including inspection of the clean side of each operating baghouse compartment for signs of dusting. If dusting is observed maintenance activities should be performed expeditiously. The Permittee shall keep records of the investigation conducted with details of any corrective action taken.

[A.A.C. R18-2-306.A.3.c]

- (b) Failure to sample and analyze bag condition at least once per year in accordance with Condition I.C.2.c of this Attachment.

[A.A.C. R18-2-306.A.3.c]

- (c) Failure to do a baghouse inspection in accordance with I.C.2.a and I.C.2.b of this Attachment.

- (2) If an excursion is detected, then the Permittee shall initiate an investigation of the baghouse within 24 hours of the first discovery of the excursion incident and take corrective action as soon as practicable to adjust or repair the baghouse to minimize possible exceedances of the particulate matter standard established in Condition V.C.1.d of this Attachment.

[A.A.C. R18-2-306.A.3.c]

- (3) In the case of any excursion incident, the record shall include an identification of the date and time of the excursion, its cause, and an explanation of the corrective actions taken, if any.

[40 CFR §64.6]

C. CAM Plan for KILN 3 Wet Scrubber

1. Primary Indicators

- a. Wet scrubber differential pressure;
- b. Wet scrubber water flow rate;
- c. Control device monitoring maintenance program as defined in Condition I.C.3.b of this Attachment.

2. Monitoring, Reporting, and Recordkeeping Requirements

a. Differential Pressure Requirement

- (1) The Permittee shall use the electronic pressure transmitter required in Condition VIII.C.3.b of this Attachment to comply with the pressure monitoring requirements of this Section.

[A.A.C. R18-2-306.A.3.c]

- (2) The Permittee shall record on a continuous basis the differential pressure across the wet scrubber.

[A.A.C. R18-2-306.A.3.c]

b. Water Flow Rate Requirements

- (1) The Permittee shall use the data from the water flow meter as required in Condition VIII.C.3.c of this Attachment to comply with the water flow monitoring requirements of this Section.

[A.A.C. R18-2-306.A.3.c]

- (2) The Permittee shall record at least 4 times per hour the water flow rate through the scrubber.

[A.A.C. R18-2-306.A.3.c]

c. Inspection and Maintenance Requirements

The Permittee shall visually inspect the wet scrubber for deterioration on a monthly basis, only during months when Kiln 3 has been operating, in accordance with Condition I.C.3.b. The results of the visual inspections shall be recorded.

[A.A.C. R18-2-306.A.3.c]

3. Excursion Determination

An excursion is defined as:

- a. Any 1-hour block average differential pressure measurement across the wet scrubber which is either greater than the maximum operating limit or less than the minimum operating limit established in the most recent performance test..

- b. Any 1-hour block average water flow rate across the wet scrubber which is less than the minimum flow rate established in the most recent performance test.

- c. Failure to perform a monthly inspection on the wet scrubber.

- (1) If an excursion is detected, then the Permittee shall initiate an investigation of the wet scrubber within 24 hours of the

first discovery of the excursion incident and take corrective action as soon as practicable to adjust or repair the wet scrubber to minimize possible exceedances of the particulate standard established in Conditions VIII.C.1.b and VIII.C.1.c of this Attachment.

[A.A.C. R18-2-306.A.3.c]

- (2) In the case of any excursion incident, the record shall include an identification of the date and time of the excursion, its cause, and an explanation of the corrective actions taken, if any.

[40 CFR §64.6]

D. CAM Operation Requirements

1. At all times, the Permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
2. Upon detecting an excursion, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.
3. Determination of whether the Permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
4. If the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which CAM did not provide an indication of an excursion while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, then the Permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR §64.7]

E. Quality Improvement Plan (QIP) Requirements

1. In the event that an accumulation of exceedances or excursions exceeds 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period based on the results of a determination made under Condition XIII.D.3 above, the Permittee shall develop and implement a QIP. The Director may otherwise specify the threshold at a higher or lower percent or rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.
2. The QIP shall include the following elements:
 - a. The Permittee shall maintain a written QIP, if required, and have it available for inspection.
 - b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the Permittee shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
 - (1) Improved preventive maintenance practices;
 - (2) Process operation changes;
 - (3) Appropriate improvements to control methods;
 - (4) Other steps appropriate to correct control performance; and
 - (5) More frequent or improved monitoring (only in conjunction with one or more of steps (1) through (5)).
3. If a QIP is required, then the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the Director if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
4. Following implementation of a QIP, the Director may require the Permittee to make reasonable changes to the QIP if the QIP is found to have:
 - a. Failed to address the cause of the control device performance problems; or
 - b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

5. Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state or local law, or any other applicable requirements under the Act.

[40 CFR §64.8]

F. Reporting and Recordkeeping Requirements

1. Along with the compliance certifications required by Condition VII of Attachment “A”, the Permittee shall submit to the Director monitoring reports required by this Section.
2. A monitoring report under this Section shall include the following information, as applicable:
 - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions, and the corrective actions taken.
 - b. A description of the actions taken to implement a QIP during the semi-annual reporting period as specified in Condition XIII.E above. Upon completion of a QIP, the Permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions occurring.
 - c. The Permittee shall maintain records of monitoring data, corrective actions taken, any written quality improvement plan required pursuant to Condition XIII.E above and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this Section (such as data used to document the adequacy of monitoring, or records of monitoring, maintenance or corrective actions).
 - d. Instead of paper records, the Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR §64.9]

G. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with the following applicable requirements as of the issuance date of this permit: 40 CFR §64.

[A.A.C. R18-2-325]

XIV. FUGITIVE DUST REQUIREMENTS

A. Applicability

Section XIV applies to any non-point source of fugitive dust in the facility. Fugitive dust areas have been identified in Attachment "E" of the Permit.

B. Particulate Matter and Opacity

Open Areas, Roadways & Streets, Storage Piles, and Material Handling

1. Emission Limitations and Standards

- a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40%.

[A.A.C. R18-2-614]

- b. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:

- (1) For a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, keep dust and other types of air contaminants to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

[A.A.C. R18-2-604.A]

- (2) Keep dust to a minimum from vacant lots or an urban or suburban open area where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means;

[A.A.C. R18-2-604.B]

- (3) Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway or alley is used, repaired, constructed, or reconstructed;

[A.A.C. R18-2-605.A]

- (4) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate

matter from becoming airborne when crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust.

[A.A.C. R18-2-605.B]

- (5) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.

[A.A.C. R18-2-606]

- (6) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored to prevent excessive amounts of particulate matter from becoming airborne;

[A.A.C. R18-2-607.A]

- (7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents to prevent excessive amounts of particulate matter from becoming airborne;

[A.A.C. R18-2-607.B]

- (8) Operate mineral tailings piles by taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Reasonable precautions shall mean wetting, chemical stabilization, revegetation or such other measures as are approved by the Director;

[A.A.C. R18-2-608]

- (9) Any other method as proposed by the Permittee and approved by the Director.

[A.A.C. R18-2-306.A.3.c]

2. Air Pollution Control Requirements

Haul Roads and Storage Piles

Water, or an equivalent control, shall be used to control visible emissions from haul roads and storage piles.

[A.A.C. R18-2-306.A.2 and -331.A.3.d]

[Material Permit Condition is indicated by underline and italics]

3. Monitoring and Recordkeeping Requirements

- a. The Permittee shall maintain records of the dates on which any of the activities listed in Condition XIV.B.1.b above were performed and the control measures that were adopted.

[A.A.C. R18-2-306.A.3.c]

- b. Opacity Monitoring Requirements

Each month, the Permittee shall monitor visible emissions from fugitive sources in accordance with Condition I.A of this Attachment.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with Section I.B shall be deemed compliance with A.A.C. R18-2-604, -605, -606, 607, -608, -614, and -804.B.

[A.A.C. R18-2-325]

XV. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

1. Particulate Matter and Opacity

- a. Emission Limitations/Standards

The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

[A.A.C. R18-2-726]

- (1) Wet blasting;
- (2) Effective enclosures with necessary dust collecting equipment; or
- (3) Any other method approved by the Director.

- b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall make a record of the following:

[A.A.C. R18-2-306.A.3.c]

- a. The date the project was conducted;
 - b. The duration of the project; and
 - c. Type of control measures employed.
3. Permit Shield

Compliance with Condition XV.A.1.a shall be deemed compliance with A.A.C. R18-2-702.B.3 and -726.

[A.A.C.R18-2-325]

B. Use of Paints

1. Volatile Organic Compounds

a. Emission Limitations/Standards

While performing spray painting operations, the Permittee shall comply with the following requirements:

- (1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

[A.A.C.R18-2-727.A]

- (2) The Permittee or their designated contractor shall not either:

[A.A.C.R18-2-727.B]

- (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

- (b) Thin or dilute any architectural coating with a photochemically reactive solvent.

- (3) For the purposes of Condition XV.B.1.a(1), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Condition XV.B.1.a(2), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

[A.A.C.R18-2-727.C]

- (a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.
 - (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.
 - (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.
 - (4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition XV.B.1.a(2), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.
[A.A.C.R18-2-727.D]
 - b. Monitoring and Recordkeeping Requirements
[A.A.C. R18-2-306.A.3.c]
 - (1) Each time a spray painting project is conducted, the Permittee shall make a record of the following:
 - (a) The date the project was conducted;
 - (b) The duration of the project;
 - (c) Type of control measures employed;
 - (d) Safety Data Sheets (SDS) for all paints and solvents used in the project; and
 - (e) The amount of paint consumed during the project.
 - (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition XV.B.1.b(1).
 - c. Permit Shield

Compliance with Condition XV.B.1.a shall be deemed compliance with A.A.C.R18-2-727.
[A.A.C.R18-2-325]

2. Opacity

a. Emission Limitation/Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

b. Permit Shield

Compliance with Condition XV.B.2.a shall be deemed compliance with A.A.C.R18-2-702.B.3.

[A.A.C. R18-2-325]

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos).

[A.A.C. R18-2-1101.A.12]

2. Monitoring and Recordkeeping Requirement

The Permittee shall keep all required records in a file. The required records shall include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with Condition XV.C.1 shall be deemed compliance with A.A.C. R18-2-1101.A.12.

[A.A.C. R18-2-325]

ATTACHMENT "C": EQUIPMENT LIST

Equipment Type	Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number	NSPS Applicable
Crushing and Screening Plant							
Primary Crusher 102	425 tph	KVS	42"x48" Jaw	N/A	1980	102	No
Primary Screen 104	425 tph	Simplicity	3616-M140A-4055	N/A	1994	104	Yes
Secondary Screen 110	300 tons	Simplicity	3616-M140B-4723	N/A	1998	110	Yes
Secondary Crusher 106	300 tph	El Jay	54" Cone	N/A	1976	106	No
SECO #1 Screen 124	300 tph	SECO	4'x12' 2-deck	N/A	Pre-1983	124	No
SECO #2 Screen 125	300 tph	SECO	4'x12' 2-deck	N/A	Pre-1983	125	No
SECO #3 Screen 126	300 tons	SECO	4'x12' 2-deck	N/A	Pre-1983	126	No
Hopper 100	<425 tph	N/A	N/A	N/A	Pre-1983	100	No
Apron Feeder 101	<425 tph	Portee	42x30	N/A	Pre-1983	101	No
Conveyor Belt 103	<425 tph	Open Trough	N/A	N/A	Pre-1983	103	No
Cone Crush Conveyor Belt 105	<425 tph	Open Trough	N/A	N/A	Pre-1983	105	No
O/S Conveyor Belt 107	<425 tph	Open Trough	N/A	N/A	Pre-1983	107	No
Short-2" Conveyor Belt 109	<425 tph	Open Trough	N/A	N/A	Pre-1983	109	No
#1 Feed Conveyor Belt 111	<425 tph	Open Trough	N/A	N/A	Pre-1983	111	No
#2 Feed Conveyor Belt 112	<425 tph	Open Trough	N/A	N/A	Pre-1983	112	No
Reversible Chat Conveyor Belt 113	<425 tph	Open Trough	N/A	N/A	Pre-1983	113	No
First Chat Conveyor Belt 114	<425 tph	Open Trough	N/A	N/A	Pre-1983	114	No
Second Chat Conveyor Belt 115	<425 tph	Open Trough	N/A	N/A	Pre-1983	115	No
1st Flux Conveyor Belt 116	<425 tph	Open Trough	N/A	N/A	Pre-1983	116	No
Kiln 1 System							
Preheater Screen 211	100tons	Kolberg	2359-366-86-ID	N/A	1986	211	Yes

Equipment Type	Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number	NSPS Applicable
Kiln 1	8.33 tph	KVS	Rotary Kiln	N/A	1967	N/A	No
PugMill 323	35tph	United Conveyor	NA	N/A	1992	323	No
Belt Conveyor BC- 210	N/A	N/A	N/A	N/A	N/A	BC-210	No
Stone Bin 301	N/A	N/A	N/A	N/A	N/A	301	No
Preheater 302	N/A	N/A	N/A	N/A	N/A	302	No
Product Cooler 306	N/A	KVS	N/A	N/A	N/A	306	No
Dust Pod 308	N/A	N/A	N/A	N/A	N/A	308	No
Collect Drag Screw Conveyor 310	N/A	Rexnord	N/A	N/A	N/A	310	No
Center Screw Conveyor 311	N/A	N/A	N/A	N/A	N/A	311	No
Cross Drag Screw Conveyor 312	N/A	Rexnord	N/A	N/A	N/A	312	No
Collect Drag Screw Conveyor 313	N/A	Rexnord	N/A	N/A	N/A	313	No
Dust Bucket Elevator 314	N/A	Rexnord	N/A	N/A	N/A	314	No
Dust Pod 315	N/A	N/A	N/A	N/A	N/A	315	No
Screw Conveyor 316	N/A	N/A	N/A	N/A	N/A	316	No
Screw Conveyor 317	N/A	N/A	N/A	N/A	N/A	317	No
Screw Conveyor 318	N/A	N/A	N/A	N/A	N/A	318	No
Bucket Elevator 319	16tph	Rexnord	N/A	N/A	N/A	319	No
Dust Bin BN-320	16tph	N/A	N/A	N/A	N/A	BN-320	No
Lime Discharge Screw Conveyor 400	N/A	KVS	N/A	N/A	N/A	400	No
Belt Conveyor 401	N/A	N/A	N/A	N/A	N/A	BC-401	No
Belt Conveyor 402	N/A	N/A	N/A	N/A	N/A	BC-402	No
Belt Conveyor 403	18.4tph	N/A	N/A	N/A	N/A	BC-403	No
Kiln 2 System							
Screen 224	100 tph	N/A	4½'x10'	N/A	1995	224	Yes

Equipment Type	Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number	NSPS Applicable
Kiln 2	22.92 tph	Traylor	Rotary Kiln	N/A	1970	N/A	No
Pug Mill 371	35tph	N/A	N/A	N/A	1992	371	No
Crossover Tunnel Belt 215	N/A	N/A	N/A	N/A	N/A	215	No
Crossover Belt 216	N/A	N/A	N/A	N/A	N/A	216	No
Crossover Belt 217	N/A	N/A	N/A	N/A	N/A	217	No
Tunnel Belt 223	N/A	N/A	N/A	N/A	N/A	223	No
-2" Belt	N/A	N/A	N/A	N/A	N/A	N/A	No
Belt Conveyor 225	N/A	N/A	N/A	N/A	N/A	BC-225	No
Reject Screw Conveyor 226	N/A	N/A	N/A	N/A	N/A	226	No
Reject Belt 227	N/A	N/A	N/A	N/A	N/A	227	No
Stone Bin 350	N/A	N/A	N/A	N/A	N/A	350	No
Weigh Belt 351	N/A	Merrick	N/A	N/A	N/A	351	No
Product Cooler 353	N/A	Niems	N/A	N/A	N/A	353	No
Vibrating Feeders 353	N/A	Jeffrey	12x42	N/A	N/A	VF-353	No
Screw Conveyor 358	N/A	Martin	N/A	N/A	N/A	358	No
Screw Conveyor 359	N/A	Martin	N/A	N/A	N/A	359	No
Dust Screw Conveyor 360	N/A	Martin	N/A	N/A	N/A	360	No
HX Screw Conveyor 361	N/A	Martin	N/A	N/A	N/A	361	No
HX Screw Conveyor 363	N/A	Martin	N/A	N/A	N/A	363	No
Dust Screw Conveyor 364	N/A	N/A	N/A	N/A	N/A	364	No
Dust Screw Conveyor 365	N/A	N/A	N/A	N/A	N/A	365	No
Bucket Elevator 366	N/A	N/A	N/A	N/A	N/A	366	No
Tank Screw Conveyor 367	N/A	N/A	N/A	N/A	N/A	367	No
Kiln 2 Dust Bin BN-368	N/A	Free-Flow	N/A	N/A	N/A	BN-368	No
Dust Storage Bin T- 410	20 tons	M-TEC	Type S 2415	2415019122	1991	T-410	No
Rotary Feeder Gate	N/A	Smoot, Co.	FT-9	N/A	N/A	G-411	No
Screw Conveyor 412	N/A	Thomas Conveyor Co.	9inch	N/A	1994	SC-412	No

Equipment Type	Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number	NSPS Applicable
Kiln 1 and 2 Lime Handling System							
Roll Crusher R-405	50 tph	Gundlach	27SS	N/A	1978-1979	R-405	No
Roll Crusher R-451	50 tph	Gundlach	2030S-2193	N/A	1996	R-451	No
Hammermill R-452	50 tph	Williams	30-GA	N/A	1996	R-452	No
Product Bin 401	400 tons	N/A	N/A	N/A	1988	401	No
Product Bin 402	50 tons	N/A	N/A	N/A	Pre-1970	402	No
Product Bin 403	800 tons	N/A	N/A	N/A	1989	403	No
Product Bin 405	1,000 tons	N/A	N/A	N/A	1996	405	No
Product Bin 406	1,000 tons	N/A	N/A	N/A	1996	406	No
Product Bin 407 [Future)	1,000 tons	TBD	TBD	N/A	TBD	407	No
Bucket Elevator E- 432	50 tph	Industrial Screw Conveyor	14X7X73	N/A	N/A	E-432	No
Diverter Gate	N/A	N/A	3P	N/A	N/A	G-403	No
Diverter Gate	N/A	N/A	3P	N/A	N/A	G-404	No
Loadout Spout	N/A	N/A	N/A	N/A	N/A	U-403	No
Loadout Spout	N/A	N/A	N/A	N/A	N/A	U-404	No

Equipment Type	Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number	NSPS Applicable
Belt Conveyor	60tph	N/A	30" X 154'	N/A	N/A	BC-405	No
Diverter Gate	N/A	N/A	N/A	N/A	N/A	G-405	No
Diverter Gate	N/A	N/A	N/A	N/A	N/A	G-406	No
Screw Conveyor	50tph	Conveyors, Inc.	16" X 58'	N/A	N/A	C-406	No
Screw Conveyor	50tph	N/A	24" x65'	N/A	N/A	C-431	No
Screw Conveyor	50tph	Conveyors, Inc.	18" X 17'	N/A	N/A	C-432	No
Belt Conveyor	50tph	N/A	24" X 28'	N/A	N/A	BC-405	No
Diverter Gate	50tph	N/A	N/A	N/A	N/A	G-451	No
Screw Conveyor	50tph	Conveyors, Inc.	20" X 28'	N/A	N/A	C-434	No
Diverter Gate	N/A	N/A	N/A	N/A	N/A	G-434	No
Loadout Spout	150 tph	Midwest Intl.	MC22-EV	MC 5171	N/A	U-482	No
Screw Conveyor (Future)	TBD	TBD	TBD	N/A	TBD	C-435	No
Screw Conveyor	52tph	Conveyors, Inc.	18" X 21'	N/A	N/A	C-441	No
Bucket Elevator	52 tph	Dricon	3007	JOB 1793	N/A	E-441	No

Equipment Type	Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number	NSPS Applicable
Diverter Gate	N/A	N/A	N/A	N/A	N/A	G-441	No
Belt Conveyor	100 tph	N/A	24" X 52'	N/A	N/A	BC-485	No
Belt Conveyor	100 tph	N/A	24" X 66'	N/A	N/A	BC-486	No
Loadout Spout	150 tph	Midwest Intl.	MC22-EV	MC 5170	N/A	U-486	No
Belt Conveyor	50tph	N/A	24" x 55'	N/A	N/A	BC-481	No
Kiln 3 System							
Stone Screen	100 tph	Kolberg	1723-366-79-1	N/A	1980	VS-234	No
Kiln 3	460 tph	Maerz	Twin Shaft Vertical	N/A	1979	N/A	No
Roll Crusher	50 tph	Gundlach	27-DA-1601	N/A	1979	RC-804	No
Lime Screen	50 tph	Kolberg	2359-366-86-ID	N/A	1986	VS-807	No
Large Bin	1,000 tons	N/A	N/A	N/A	N/A	BN-809	No
Small Bin	130 tons	N/A	N/A	N/A	N/A	BN-808	No
Vibrating Feeders	N/A	N/A	N/A	N/A	N/A	VS-231, VS-232	No
Reclaim Belt	N/A	N/A	N/A	N/A	N/A	BC-233	No
Stone Bin	N/A	N/A	N/A	N/A	N/A	BN-235	No
Vibrating Feeder	N/A	N/A	N/A	N/A	N/A	VF-236	No
Belt Conveyor	N/A	N/A	N/A	N/A	N/A	BC-237	No
Weigh Hopper	N/A	N/A	N/A	N/A	N/A	238	No
Stone Hooer	N/A	N/A	N/A	N/A	N/A	N/A	No
Vibrating Feeders	N/A	NIA	N/A	N/A	N/A	VF-801	No
Reject Conveyor	N/A	N/A	N/A	N/A	N/A	BC-802	No

Equipment Type	Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number	NSPS Applicable
Product Conveyor	N/A	N/A	N/A	N/A	N/A	BC-803	No
Recirculating Conveyor	N/A	N/A	N/A	N/A	N/A	N/A	No
Bucket Elevator	N/A	N/A	N/A	N/A	N/A	BE-805	No
Screw Conveyor	N/A	N/A	N/A	N/A	N/A	N/A	No
Dust Blend System Bin	20 tons	M-TEC	Type S 2415	N/A	N/A	N/A	No
Truck Belt	N/A	N/A	N/A	N/A	N/A	BC-810	No
Rail Belt	N/A	N/A	N/A	N/A	N/A	N/A	No
Solid Fuel Handling System							
Solid Fuel Crusher 506	50 tph	Gundlach	27SS	N/A	1979	RC-506	Yes
Solid Fuel Mill 510	6.13 tph	Raymond	453	N/A	1979	510	No
Solid Fuel Mill 517	10.23 tph	Raymond	533-A	N/A	1979	517	Yes
Solid Fuel Bin 508	45 tons	N/A	N/A	N/A	1990	508	No
Solid Fuel Bin 515	45 tons	Joe White Tank Company	N/A	N/A	2000	515	Yes
Coal Hopper 503-1	49 tons	Custom	N/A	N/A	2004	503-1	Yes
Coke Hopper 503-2	49 tons	Custom	N/A	N/A	2004	503-2	Yes
Weigh Feeder 504	21 tph	Merrick	455	455MM-27105	2004	504	No
Weigh Feeder 505	21 tph	Merrick	455	455MM-27106	2004	505	No
Solid Fuel Belt 507	N/A	N/A	N/A	N/A	N/A	507	No
Weigh Belt 509	N/A	Merrick	N/A	N/A	N/A	509	No
Weigh Belt 516	N/A	Merrick	N/A	N/A	N/A	516	No
Pony Kiln Motors							
Diesel K1 Pony Motor	41.9 hp	Continental	TMD27	N/A	1995	N/A	NESHAP
Diesel K2 Pony Motor	81.8 hp	Deutz	Deutz F5L	N/A	1995	N/A	NESHAP
Pollution Control Equipment							
Dust Collector 120	2,725 cfm	Mikropul	48S-8-20	N/A	N/A	DC-120	No
Dust Collector 121	3,625 cfm	Mikropul	64S-8-20	N/A	N/A	DC-121	No

Equipment Type	Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number	NSPS Applicable
Dust Collector 122	4,550 cfm	Mikropul	80S-8-20	N/A	N/A	DC-122	No
Dust Collector 228	1,000 cfm	WAM	FJA-160	N/A	N/A	DC-228	No
Dust Collector 241	7,500 cfm	Mikrooul	100S-10-20C	N/A	N/A	DC-241	No
Cyclone 307	N/A	N/A	N/A	N/A	N/A	307	No
Gravel Bed Filters 309	N/A	Rexnord	N/A	N/A	N/A	309	No
Dust Collector 321	1,500 cfm	Mikropul	25S-10-20C	N/A	N/A	DC-321	No
Dust Collector 356	84,000 cfm	Fuller	4M300C14-6	N/A	N/A	DC-356	No
Dust Collector 369	1,200 cfm	Mikropul	25S-8-30A	N/A	N/A	DC-369	No
Dust Collector 401	3,100 acfm	Wheelabrator	33-36	20-3811A	N/A	DC-401	No
Dust Collector 402	6,240 cfm	Wheelabrator	45-36	N/A	N/A	DC-402	No
Dust Collector 403	600 acfm	WAM	FJA-110	N/A	N/A	DC-403	No
Dust Collector 404	1,000 cfm	WAM	FJA-250	N/A	N/A	DC-404	No
Dust Collector 406	800 cfm	DCE	DLMV12/10 F2	N/A	N/A	DC-406	No
Dust Collector 408	600 cfm	I.A.C.	72-TB-BV1 - 22:56	N/A	N/A	DC-408	No
Dust Collector 431	1,000 cfm	Mikropul	25N6-B	N/A	N/A	DC-431	No
Dust Collector 481	400 cfm (assumed)	TBD	TBD	TBD	TBD	DC-481	No
Dust Collector 482	400 cfm	WAM	FJA-65	N/A	N/A	DC-482	No
Dust Collector 483	2,000 cfm	DCE	DU-30-FIO	N/A	N/A	DC-483	No
Dust Collector 485	1,000 cfm (assumed)	TBD	TBD	TBD	TBD	DC-485	No
Dust Collector 486	1,000 cfm	Mikropul	25N6-B	N/A	N/A	DC-486	No
Dust Collector 487	10,000 cfm	IAC	84TB-BHWT-144:S6	N/A	N/A	DC-487	No
Dust Collector 600	30,000-38,000 cfm	Ducon	Size 96 UWA	N/A	N/A	DC-600	No
Dust Collector 730	600 cfm	IAC.	72-TB-BV1-25:56	N/A	N/A	DC-730	No

Equipment Type	Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number	NSPS Applicable
Dust Collector 779	400 cfm	WAM	FJA-65	N/A	N/A	DC-779	No
Dust Collector 850	600 cfm	WAM	FJA-110	N/A	N/A	DC-850	No
Dust Collector 851	1,200 cfm	Mikropul	16S-10-30B	N/A	N/A	DC-851	No
Dust Collector 852	1,200 cfm	Mikropul	16S-10-30B	N/A	N/A	DC-852	No
Dust Collector 853	1,500 cfm	Mikropul	25S-10-30B	N/A	N/A	DC-853	No
Dust Collector 854	400 cfm	WAM	FJA-65	N/A	N/A	DC-854	No
Gasoline Storage Tank	2,000 gallons	Tyco	N/A	N/A	1999	N/A	NESHAP

ATTACHMENT "D": HOUSEKEEPING PLAN**Air Quality Control Permit No. 81660****For****Lhoist North America of Arizona, Inc.**

The accumulation of dust in the various plant areas shall be removed by plant employees with the use of a vacuum truck, manual sweeping, and manual shoveling methods. This work shall be completed on a daily routine basis on the catwalks, railings, buildings, around transfer points, and process equipment.

The supervisors in each department shall assign their workers to inspect, and clean as needed, the areas for which they are responsible. On a daily basis each area of the plant shall be inspected by the assigned workers and a "DAILY HOUSEKEEPING INSPECTION AND ACTIVITY REPORT" (Tables 1.1, 1.2, 1.3, and 1.4 of this Attachment) shall be filed. This report shall record the findings of the inspection and the cleanup work performed in the different areas. After recording on the daily report what activity took place in each area, the assigned worker shall sign his (or her) initials next to each of the specified areas listed on the report signifying for the record that the areas were inspected and the cleanup work was performed.

The cleanup activity shall be on an on-going basis and the general practice shall be to clean up identified areas within a 24 hour period. The supervisors shall routinely monitor the plant housekeeping and the daily reports, and manage the cleanup activities to ensure that all areas are being maintained. On a weekly basis the supervisors shall complete the "SUPERVISORS WEEKLY HOUSEKEEPING REPORT" (Tables 2.1, 2.2, and 2.3) to record the main cleanup efforts in the various areas of the plant. The supervisors shall maintain both the daily and weekly reports on file for inspection.

The following descriptions of housekeeping activities use the term "loose dust" to describe the material to be cleaned up. For the purposes of the housekeeping plan, loose dust is defined as the accumulation of fine particulate process material that is capable of becoming airborne.

HOUSEKEEPING PLAN EQUIPMENT AND AREA DESCRIPTIONS

- 1 Rotary Kiln Areas
 - 1.1 Kiln #1 Dust Collector Area: Clean the loose dust off the dust collector pod discharges, drag conveyors, and the ground below this equipment. Also clean the dust from the top of the dust collector pods and the platform structure.
 - 1.2 Kiln #1 Pier Area: Remove the loose dust from the kiln piers catwalk, the area below the kiln, and around the kiln piers.
 - 1.3 Kiln #1 Preheater Area: Clean the loose dust off of the preheater platform levels, stone screen, feed belt, and the area below the preheater at ground level.
 - 1.4 Kiln #1 Main Blower Area: Clean the loose dust off the main blower, associated equipment, and the ground surrounding the main blower assembly.
 - 1.5 Kiln #1 Cooler Area: Clean the loose dust off the discharge screw and belt conveyor structures, belt conveyor pit, and the concrete pad.
 - 1.6 Kiln #1 Dust Bin Area: Remove the loose dust from and below dust screw conveyors, and the area surrounding the bucket elevator. Also clean the dust bin platform levels, stairs, pugmill, and the truck loading concrete pad below the dust bin.

- 1.7 Kiln #2 Dust Collection Area: Clean the loose dust off of the hopper rotary airlocks, the screw conveyors, and ground below this equipment.
- 1.8 Kiln #2 Pier Area: remove the loose dust from the kiln piers's catwalk, the area below the kiln, and around the kiln piers.
- 1.9 Kiln #2 Dust Chamber Area: Remove the loose dust from the top of the dust chamber screw conveyor, the surrounding structure, and the ground level area below this equipment.
- 1.10 Kiln #2 ID Fan Area: Clean the loose dust from the equipment, structure, and ground level areas surrounding the ID fan.
- 1.11 Kiln #2 Cooler Area: Clean the loose dust off discharge vibrators and belt conveyor structures, and the concrete pad.
- 1.12 Kiln #2 Dust Bin Area: Clean or vacuum the loose dust on or below the dust screw conveyor, and the area surrounding the bucket elevator. Remove loose dust off the dust bin platforms, pugmill, and the ground level truck loading areas.
- 1.13 Kiln #2 Stone Feed Areas: Clean up the loose dust out of stone feed tunnels, and off and below the stone feed conveyor structures and catwalks.
- 1.14 #1 and #2 Coal Ring Dump Area: Remove the loose dust from kiln coal ring collection areas south of the cooler area concrete pads, and north of the first piers.
- 1.15 #1 and #2 Coal Mill Area: Dispose of the loose dust from the ground level areas surrounding the coal mills. Clean the dust from the coal bin discharge level platform and related equipment, and the conveyor head pulley and on top of the coal bins.
- 1.16 #1 and #2 Firedeck Area: Clean up the loose dust off the firedeck platform area at the rotary kilns' discharge.
- 1.17 Air Compressor Area: Remove the loose dust off the rotary kilns's air compressor and related structures. Clean the dust from the ground on the compressor shelter and surrounding area.
- 2 Rotary Kiln Lime Storage Areas
 - 2.1 Bin T-402 Open Area: Remove the loose dust from the ground level area surrounding Bin T-402.
 - 2.2 Bin T-403 Open Area: Dispose of the loose dust from the area surrounding Bin T-403.
 - 2.3 Bin T-403/DC-483 Tuck Loadout Area: Clean the loose dust off of the top of the bin, stairs, loadout platform, discharge conveyor, and the loose dust at the ground level near or below the bucket elevator, discharge conveyor, and the truck loading concrete pad.
 - 2.4 Kiln Discharge Conveyors: Remove the loose dust off and below each rotary kiln discharge conveyor structures and catwalks.
- 3 Vertical Kiln #3 Areas
 - 3.1 Stone Reclaim Area: Clean up the loose dust on the stone reclaim tunnel, and on and below the stone conveyor structure.

- 3.2 Stone Bin Area: Remove the loose dust from the top of the stone bin, screen structure, bin discharge platform equipment, and the surrounding ground level area.
- 3.3 Kiln Discharge Area: Clean the loose dust off the discharge feeders, product conveyor structure, and the surrounding concrete pad.
- 3.4 Product Crushing Area: Remove the loose dust off the crusher equipment and platform level, and off the ground level around and below the bucket elevator and crusher.
- 3.5 Rail Loadout Belt Area: Clean off the loose dust on and below the rail loadout conveyor belt structure.
- 3.6 Rail Loading Area: Clean up the loose dust from the rail loadout platform structure and surrounding area.
- 3.7 Truck Loadout Belt Area: Clean off the loose dust on and below the truck loadout conveyor structure.
- 3.8 Truck Loading Area: Clean the loose dust off the truck loading platform structure, stairs, and the surrounding ground level area.
- 3.9 Local Control Room Area: Remove the loose dust from the ground level areas surrounding the local kiln control room.
- 3.10 Top of Storage Bins: Remove the loose dust from the top elevator platform structure, lime screen structure, top surface of the #3 lime storage bins, and the related catwalks.
- 3.11 Kiln Levels: Clean up the loose dust off the floors, catwalks, stairs, and related equipment, on each level of #3 vertical kiln.
- 4 Crushing and Screening Plant Areas
 - 4.1 Area Below Apron feeder: Clean the loose dust off the apron feeder structure and off the concrete floor below.
 - 4.2 Jaw Crusher Area: Clean up the loose dust off the jaw crusher, the upper catwalk and control room, on and below the jaw crusher discharge conveyor belt, and the surrounding ground level floor.
 - 4.3 Cone Crusher Area: Remove the loose dust on and below the cone crusher feed conveyor structure, the cone crusher, the associated catwalk, and the ground level concrete floor.
 - 4.4 Primary Screen Area: Clean the loose dust off the primary screen structure, including the catwalk and ladder, and lower ground level areas.
 - 4.5 Area Below Kiln #3 Belts: remove the loose dust on and below the two kiln #6 stone feed conveyor belt structures.
 - 4.6 Area Below Second -2" Belt: Remove the loose dust on and below the two conveyor belt structures, and associated catwalks and platforms. Also clean the loose dust off the dust collector structures, and the lower dust collector discharge equipment and concrete floor.
 - 4.7 Secondary Screening Area: Clean the loose dust off the secondary screens and associated platforms and catwalks. Also remove the surrounding ground level loose dust below the secondary screens.
 - 4.8 Area Below the #1 Feed Conveyor: Remove the loose dust on and below the #1 feed conveyor structure.
 - 4.9 Area Below #2 Feed Conveyor: Remove the loose dust on and below the #2 feed conveyor structure.

4.10 Areas Below Flux Conveyors: Remove the loose dust on and below the flux conveyor structures.

4.11 Area Below Chat Conveyor: remove the loose dust on and below the Chat Conveyor structures.

**Table 1.1 : Daily Housekeeping Inspection and Activity Report
ROTARY KILN AREAS**

Date : _____

I = Inspected C = Cleaned

AREAS	I/C	INITIALS	COMMENTS
1.1 Kiln #1 Dust Collector Area			
1.2 Kiln #1 Pier Area			
1.3 Kiln #1 Preheater Area			
1.4 Kiln #1 Main Blower Area			
1.5 Kiln #1 Cooler Area			
1.6 Kiln #1 Dust Bin Area			
1.7 Kiln #2 Dust Collector Area			
1.8 Kiln #2 Pier Area			
1.9 Kiln #2 Dust Chamber Area			
1.10 Kiln #2 ID Fan Area			
1.11 Kiln #2 Cooler Area			
1.12 Kiln #2 Dust Bin Area			
1.13 Kiln #2 Stone Feed Areas			
1.14 #1 and #2 Coal Ring Dump Areas			
1.15 #1 and #2 Coal Mill Areas			
1.16 #1 and #2 Firedeck Areas			
1.17 #2 Air Compressor Area			
Other :			

N/A: Equipment and/or Process was not active during inspection.

O/S: Equipment and/or Process has not been reactivated as part of Douglas operation.

**Table 1.2 : Daily Housekeeping Inspection and Activity Report
 ROTARY KILN LIME STORAGE AREAS**

Date : _____

I = Inspected C = Cleaned

AREAS	I/C	INITIALS	COMMENTS
2.1 Bin T-402 Open Area			
2.2 Bin T-403 Open Area			
2.3 Bin T-403/C-483 Truck Load out Area			
2.4 Kiln Discharge Conveyors			
Other :			

Comments:

N/A: Equipment and/or Process was not active during inspection.

O/S: Equipment and/or Process has not been reactivated as part of Douglas operation.

**Table 1.3 : Daily Housekeeping Inspection and Activity Report
VERTICAL KILN #3 AREAS**

Date : _____

I = Inspected C = Cleaned

AREAS	I/C	INITIALS	COMMENTS
3.1 Stone Reclaim Area			
3.2 Stone Bin Area			
3.3 Kiln Discharge Area			
3.4 Product Crushing Area			
3.5 Rail Load out Belt Area			
3.6 Rail Loading Area			
3.7 Truck Load out Belt Area			
3.8 Truck Loading Area			
3.9 Local Control Room Area			
3.10 Tops of Storage Bins			
3.11 Kiln Levels			
Other :			

Comments:

N/A: Equipment and/or Process was not active during inspection.

O/S: Equipment and/or Process has not been reactivated as part of Douglas operation.

**Table 1.4 : Daily Housekeeping Inspection and Activity Report
CRUSHING AND SCREENING PLANT AREAS**

Date : _____

I = Inspected C = Cleaned

AREAS	I/C	INITIALS	COMMENTS
4.1 Area Below Apron Feeder			
4.2 Jaw Crusher Pit Area			
4.3 Cone Crusher Area			
4.4 Primary Screen Area			
4.5 Area Below Kiln #3 Belts			
4.6 Area Below Second -2" Belt			
4.7 Secondary Screening Area			
4.8 Area Below #1 Feed Conveyor			
4.9 Area Below #2 Feed Conveyor			
4.10 Area Below Flux Conveyors			
4.11 Area Below Chat Conveyor			
Other :			

Comments:

N/A: Equipment and/or Process was not active during inspection.

O/S: Equipment and/or Process has not been reactivated as part of Douglas operation.

**Table 2.1 : Supervisor's Weekly Housekeeping Report
 ROTARY KILNS AND LIME STORAGE AREAS**

WEEK BEGINNING : _____

DAY	ACTIVITIES
Monday	Initial: _____
Tuesday	Initial: _____
Wednesday	Initial: _____
Thursday	Initial: _____
Friday	Initial: _____
Saturday	Initial: _____
Sunday	Initial: _____

Supervisor's Signature _____

**Table 2.2 : Supervisor's Weekly Housekeeping Report
 VERTICAL KILN #3 AND LIME STORAGE AREAS**

WEEK BEGINNING : _____

DAY	ACTIVITIES
Monday	Initial: _____
Tuesday	Initial: _____
Wednesday	Initial: _____
Thursday	Initial: _____
Friday	Initial: _____
Saturday	Initial: _____
Sunday	Initial: _____

Supervisor's Signature _____

**Table 2.3 : Supervisor's Weekly Housekeeping Report
CRUSHING AND SCREENING PLANT AREAS**

WEEK BEGINNING : _____

DAY	ACTIVITIES
Monday	Initial: _____
Tuesday	Initial: _____
Wednesday	Initial: _____
Thursday	Initial: _____
Friday	Initial: _____
Saturday	Initial: _____
Sunday	Initial: _____

Supervisor's Signature: _____

ATTACHMENT “E”: PLANT FUGITIVE DUST AREAS

Figure 6.1

